FLOOD INSURANCE STUDY

LAKE COUNTY, INDIANA

AND INCORPORATED AREAS

VOLUME 2 OF 3

COMMUNITY NAME	COMMUNITY NUMBER
CEDAR LAKE, TOWN OF	180127
CROWN POINT, CITY OF	180128
DYER, TOWN OF	180129
EAST CHICAGO, CITY OF	180130
GARY, CITY OF	180132
GRIFFITH, TOWN OF	185175
HAMMOND, CITY OF	180134
HIGHLAND, TOWN OF	185176
HOBART, CITY OF	180136
LAKE COUNTY (UNINCORPORATED AREAS)	180126
LAKE STATION, CITY OF	180131
LOWELL, TOWN OF	180137
MERRILLVILLE, TOWN OF	180138
MUNSTER, TOWN OF	180139
NEW CHICAGO, TOWN OF	180140
SCHERERVILLE, TOWN OF	180142
SCHNEIDER, TOWN OF	180143
ST. JOHN, TOWN OF	180141
WHITING, CITY OF	180313
WINFIELD, TOWN OF	180515

PRELIMINARY

Federal Emergency Management Agency

FLOOD INSURANCE STUDY NUMBER
18089CV002A

TABLE OF CONTENTS – Volume 1

TABLE OF CONTENTS – Volume 2

TABLES

EXHIBITS

TABLE OF CONTENTS – Volume 3

EXHIBITS

5.0 INSURANCE APPLICATION

For flood insurance rating purposes, flood insurance zone designations are assigned to a community based on the results of the engineering analyses. These zones are as follows:

Zone A

Zone A is the flood insurance risk zone that corresponds to the 1-percent annual chance floodplains that are determined in the FIS by approximate methods. Because detailed hydraulic analyses are not performed for such areas, no BFEs or base flood depths are shown within this zone.

Zone AE

Zone AE is the flood insurance risk zone that corresponds to the 1-percent annual chance floodplains that are determined in the FIS by detailed methods. In most instances, whole-foot BFEs derived from the detailed hydraulic analyses are shown at selected intervals within this zone.

Zone AH

Zone AH is the flood insurance risk zone that corresponds to the areas of 1-percent annual chance shallow flooding (usually areas of ponding) where average depths are between 1 and 3 feet. Whole-foot BFEs derived from the detailed hydraulic analyses are shown at selected intervals within this zone.

Zone AO

Zone AO is the flood insurance risk zone that corresponds to the areas of 1-percent annual chance shallow flooding (usually sheet flow on sloping terrain) where average depths are between 1 and 3 feet. Average whole-foot base flood depths derived from the detailed hydraulic analyses are shown within this zone.

Zone AR

Zone AR is the flood insurance risk zone that corresponds to an area of special flood hazard formerly protected from the 1-percent annual chance flood event by a flood-control system that was subsequently decertified. Zone AR indicates that the former flood-control system is being restored to provide protection from the 1-percent annual chance or greater flood event.

Zone A99

Zone A99 is the flood insurance risk zone that corresponds to areas of the 1-percent annual chance floodplain that will be protected by a Federal flood protection system where construction has reached specified statutory milestones. No BFEs or depths are shown within this zone.

Zone V

Zone V is the flood insurance risk zone that corresponds to the 1-percent annual chance coastal floodplains that have additional hazards associated with storm waves. Because approximate hydraulic analyses are performed for such areas, no BFEs are shown within this zone.

Zone VE

Zone VE is the flood insurance risk zone that corresponds to the 1-percent annual chance coast floodplains that have additional hazards associated with storm waves. Whole-foot BFEs derived from the detailed hydraulic analyses are shown at selected intervals within this zone.

Zone X

Zone X is the flood insurance risk zone that corresponds to areas outside the 0.2-percent annual chance floodplain, areas within the 0.2-percent annual chance floodplain, areas of 1-percent annual chance flooding where average depths are less than 1 foot, areas of 1-percent annual chance flooding where the contributing drainage area is less than 1 square mile, and areas protected from the 1-percent annual chance flood by levees. No BFEs or base flood depths are shown within this zone.

Zone X (Future Base Flood)

Zone X (Future Base Flood) is the flood insurance risk zone that corresponds to the 1-percent annual chance floodplains that are determined based on future-condition hydrology. No BFEs or base flood depths are shown within this zone.

Zone D

Zone D is the flood insurance risk zone that corresponds to unstudied areas where flood hazards are undetermined, but possible.

6.0 FLOOD INSURANCE RATE MAP

The DFIRM is designed for flood insurance and floodplain management applications.

For flood insurance applications, the maps designate flood insurance risk zones as described in Section 5.0 and, in the 1-percent annual chance floodplains that were studied by detailed methods, shows selected whole-foot BFEs or average depths. Insurance agents use the zones and BFEs in conjunction with information on structures and their contents to assign premium rates for flood insurance policies.

For floodplain management applications, the map shows by tints, screens, and symbols, the 1- and 0.2-percent annual chance floodplains, the 1-percent annual chance fully developed floodplains, floodways, and the locations of selected cross sections used in the hydraulic analyses and floodway computations.

The current Flood Insurance Rate Map presents flooding information for the geographic area of Lake County. Historical data relating to the maps prepared for each community are presented in Table 10, Community Map History.

7.0 OTHER STUDIES

This FIS incorporates all previously published FISs and FIRMs for the incorporated and unincorporated areas within Lake County.

This report either supersedes or is compatible with all previous studies published on streams studied in this report and should be considered authoritative for the purposes of the National Flood Insurance Program.

8.0 LOCATION OF DATA

Information concerning the pertinent data used in the preparation of this study can be obtained by contacting FEMA, Flood Insurance and Mitigation Division, 536 South Clark Street, Sixth Floor, Chicago, Illinois 60605.

COMMUNITY NAME	INITIAL IDENTIFICATION	FLOOD HAZARD BOUNDARY MAP REVISION DATE	FIRM EFFECTIVE DATE	FIRM REVISIONS DATE
CEDAR LAKE, TOWN OF	DECEMBER 28,1973	MARCH 26, 1976	MARCH 15, 1982	None
CROWN POINT, CITY OF	NOVEMBER 23, 1973	MARCH 26, 1976	MARCH 18, 1980	FEBRUARY 12, 1982
DYER, TOWN OF	FEBRUARY 1, 1974	JUNE 18, 1976	MAY 15, 1984	SEPTEMBER 18, 1986
EAST CHICAGO, CITY OF	APRIL 12, 1974	APRIL 9, 1976	JUNE 4, 1980	None
GARY, CITY OF	JUNE 28, 1974	JUNE 4, 1976	MARCH 16, 1981	None
GRIFFITH, TOWN OF	APRIL 18, 1972	JULY 1, 1974	MAY 30, 1975	OCTOBER 15, 1982
HAMMOND, CITY OF	MARCH 15, 1974	AUGUST 6, 1976	MARCH 16, 1981	None
HIGHLAND, TOWN OF	MAY 19, 1972	None	MAY 19, 1972	OCTOBER 10, 1975
HOBART, CITY OF	APRIL 12, 1974	JUNE 18, 1976	DECEMBER 4, 1979	None
LAKE COUNTY UNINCORPORATED AREAS	DECEMBER 6, 1974	JUNE 24, 1977	SEPTEMBER 2, 1981	None
LAKE STATION, CITY OF	JUNE 21, 1974	JULY 2, 1976	SEPTEMBER 5, 1979	None
LOWELL, TOWN OF	DECEMBER 28, 1973	JANUARY 9, 1976	DECEMBER 4, 1979	OCTOBER 18, 1983
MERRILLVILLE, TOWN OF	JULY 19, 1974	JULY 30, 1976	OCTOBER 15, 1981	None

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, INDIANA AND INCORPORATED AREAS

COMMUNITY MAP HISTORY

COMMUNITY NAME	INITIAL IDENTIFICATION	FLOOD HAZARD BOUNDARY MAP REVISION DATE	FIRM EFFECTIVE DATE	FIRM REVISIONS DATE
MUNSTER, TOWN OF	DECEMBER 17, 1974	OCTOBER 15, 1976	MAY 16, 1983	None
NEW CHICAGO, TOWN OF	MAY 31, 1974	MAY 21, 1976	JANUARY 2, 1980	None
SCHERERVILLE, TOWN OF	NOVEMBER 30, 1973	OCTOBER 31, 1975	MAY 1, 1980	None
SCHNEIDER, TOWN OF	DECEMBER 17, 1973	JUNE 11, 1976	AUGUST 1, 1980	None
ST. JOHN, TOWN OF	NOVEMBER 30, 1973	APRIL 9, 1976	NOVEMBER 1, 1979	JUNE 11, 1982
WHITING, CITY OF	JANUARY 10, 1975	JANUARY 2, 1976	MARCH 6, 1981	None
WINFIELD, TOWN OF	SEPTEMBER 2, 1981	None	SEPTEMBER 2, 1981	None

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, INDIANA AND INCORPORATED AREAS

COMMUNITY MAP HISTORY

9.0 BIBLIOGRAPHY AND REFERENCES

1. Federal Emergency Management Agency, Flood Insurance Study, Lake County, Indiana, Unincorporated Areas, Washington, D.C., Flood Insurance Study, March 2 1981; Flood Insurance Rate Map, March 2 1981.

2. Federal Emergency Management Agency, Flood Insurance Study, City of Crown Point, Lake County, Indiana , Washington, D.C., Flood Insurance Study, September 1979; Flood Insurance Rate Map, September 1979.

3. Federal Emergency Management Agency, Flood Insurance Study, City of Hammond, Lake County, Indiana, Washington, D.C., Flood Insurance Study, September 16 1980; Flood Insurance Rate Map, September 16 1980.

4. Federal Emergency Management Agency, Flood Insurance Study, City of Lake Station, Lake County, Indiana, Washington, D.C., Flood Insurance Study, March 1979; Flood Insurance Rate Map, March 1979.

5. Federal Emergency Management Agency, Flood Insurance Study, City of Hobart Lake County, Indiana, Washington, D.C., Flood Insurance Study, June 1979; Flood Insurance Rate Map, June 1979.

6. Federal Emergency Management Agency, Flood Insurance Study, City of Gary Lake County, Indiana, Washington, D.C., Flood Insurance Study, September 16 1980; Flood Insurance Rate Map, September 16 1980.

7. Federal Emergency Management Agency, Flood Insurance Study, City of East Chicago, Lake County, Indiana, Washington, D.C., Flood Insurance Study, December 1979; Flood Insurance Rate Map, December 1979.

8. Federal Emergency Management Agency, Flood Insurance Study, Town of Schneider, Lake County, Indiana, Washington, D.C., Flood Insurance Study, February 1980; Flood Insurance Rate Map, February 1980.

9. Federal Emergency Management Agency, Flood Insurance Study, Town of Munster, Lake County, Indiana, Washington, D.C., Flood Insurance Study, September 16 1982; Flood Insurance Rate Map, September 16 1982.

10. Federal Emergency Management Agency, Flood Insurance Study, Town of Highland, Lake County, Indiana, Washington, D.C., Flood Insurance Study, June 15 1983; Flood Insurance Rate Map, June 15 1983.

11. Federal Emergency Management Agency, Flood Insurance Study, Town of Merrillville, Lake County, Indiana, Washington, D.C., Flood Insurance Study, April 15 1981; Flood Insurance Rate Map, April 15 1981.

12. Federal Emergency Management Agency, Flood Insurance Study, Town of St. John, Lake County, Indiana, Washington, D.C., Flood Insurance Study, May 1979; Flood Insurance Rate Map, May 1979.

13. Federal Emergency Management Agency, Flood Insurance Study, Town of Griffith, Lake County, Indiana, Washington, D.C., Flood Insurance Study, April 15 1982; Flood Insurance Rate Map, April 15 1982.

14. Federal Emergency Management Agency, Flood Insurance Study, Town of Schererville, Lake County, Indiana, Washington, D.C., Flood Insurance Study, November 1979; Flood Insurance Rate Map, November 1979.

15. Federal Emergency Management Agency, Flood Insurance Study, Town of New Chicago, Lake County, Indiana, Washington, D.C., Flood Insurance Study, July 1979; Flood Insurance Rate Map, July 1979.

16. Federal Emergency Management Agency, Flood Insurance Study, Town of Cedar Lake, Lake County, Indiana, Washington, D.C., Flood Insurance Study, September 15 1981; Flood Insurance Rate Map, September 15 1981.

17. Federal Emergency Management Agency, Flood Insurance Study, Town of Dyer, Lake County, Indiana, Washington, D.C., Flood Insurance Study, October 2 1997; Flood Insurance Rate Map, October 2 1997.

18. Federal Emergency Management Agency, Flood Insurance Study, Town of Lowell, Lake County, Indiana, Washington, D.C., Flood Insurance Study, June 1979; Flood Insurance Rate Map, June 1979.

19. U.S. Department of the Census, Bureau of the Census, 2007 Population Estimates, using American Fact Finder, retrieved September 19, 2008 from http://factfinder.census.gov.

20. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Monthly Normals of Temperature, Precipitation, and Heating and Cooling Degree Days, 1941-70, August 1973.

21. U.S. Department of Agriculture, Soil Conversation Service, in cooperation with Purdue University Agricultural Experiment Station, Soil Survey of Lake County, Indiana, July 1972.

22. Indiana Department of Natural Resources, Geological Survey, Environmental Geology of Lake and Porter Counties, Indiana – An Aid to Planning, 1975.

23. The Indianapolis Star, Indianapolis, Indiana, April 6, 1978.

24. The Post-Tribune, Gary, Indiana, April 10, 1978.

25. Lake County, Indiana, Storm Review Standards, Lake County Surveyor's Office Storm water Review Criteria, November, 1971.

26. U.S. Department of Agriculture, Soil Conservation Service, West Creek Watershed Work Plan, 1959.

27. State of Indiana, Kankakee River Basin, Indiana, Report on Water and Related Land Resources, November, 1976.

28. U.S. Geological Survey, Circular 710, Floods in Indiana, Technical Manual for Estimating their Magnitude and Frequency, 1974.

29. U.S. Army Corps of Engineers, Hydraulic Engineering Center, Computer Program 723-X6-L2010, HEC-1 Flood Hydrograph Package, Davis, California, January 1973 with updates.

30. U.S. Army Corps of Engineers, HEC-1, User's Manual, Addendum 2.

31. U.S. Department of Commerce, Weather Bureau, Technical Paper No. 40, Rainfall Frequency Atlas of the United States (for durations from 30 minutes to 24 hours and return period from 1 to 100 years), Washington, D.C.: Government Printing Office, May 1961.

32. U.S. Department of the Interior, Geological Survey, Water Resources Data for Indiana, Water Years 1961-1975.

33. Water Resources Council, "Guidelines for Determining Flood Flow Frequencies," Bulletin 17, March 1976.

34. U.S. Army Corps of Engineers, Hydrologic Engineering Center, HEC-2 Water Surface Profiles Generalized Computer Program, Davis, California, January 1976.

35. U.S. Army Corps of Engineers, Revised Report on Great Lakes Open-Coast Flood Levels (Phase I), Detroit, Michigan, April 1988.

36. Soil Conservation Service, Technical Release 61, WSP-2 Computer Program, May 1976.

37. U.S. Army Corps of Engineers, Flood Plain Information Deep River-Turkey Creek-Duck Creek, Lake County, Indiana, Chicago, Illinois, March 1973.

38. U.S. Army Corps of Engineers, Hydraulic Engineering Center, HEC-RAS V. 3.1, Davis, California, November 2002.

39. Federal Emergency Management Agency, Check-RAS V. 1.1, July 2002.

40. U.S. Army Corps of Engineers, Flood Plain Information: Hart Ditch, Cady Marsh Ditch, and Spring Street Ditch, Lake County, Indiana, Chicago, Illinois, March 1974.

41. The Hammond Times, Hammond, Indiana, October 11, 1954.

42. Interview with Clerk-Treasurer of Lake Station.

43. U.S. Department of Agriculture, U.S, Department of Interior, State of Indiana, Kankakee River Basin, Indiana, Report on Water and Related Land Resources, November 1971.

44. Flood Plain Information Report on Little Calumet River and Tributaries, Illinois and Indiana, June 1965.

45. U.S Geological Survey, Statistical Summary of Indiana Streamflow Data, 1976

46. U.S. Army Corps of Engineers, Chicago District, Section 205 Study in Griffith, Indiana, January 1978.

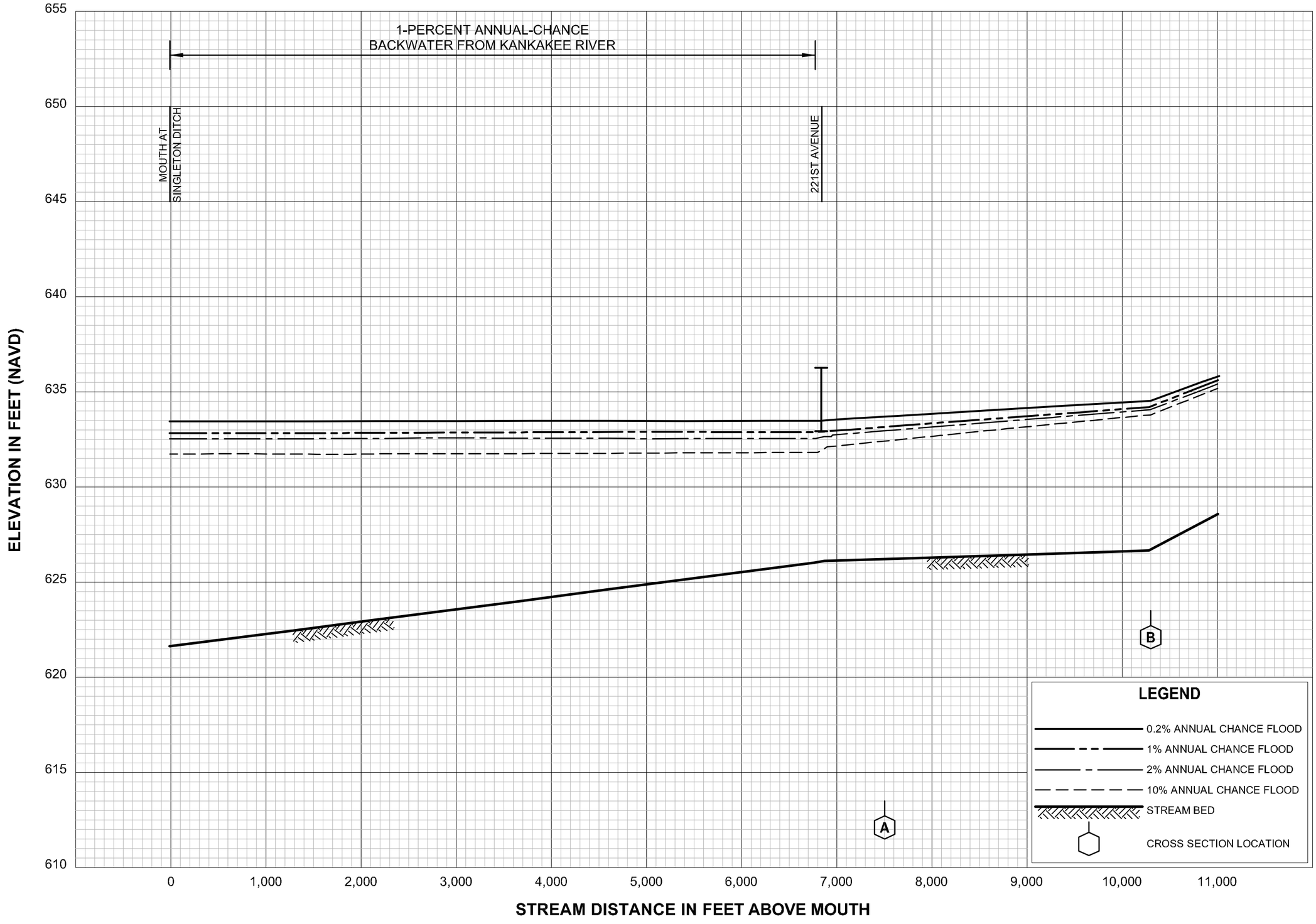
47. Griffith Indiana Zoning Ordinance, Number 79-15, March 13, 1979, as amended.

48. Town of Highland, Indiana Zoning Ordinance, Number 798, January 22, 1979, as amended.

49. Indiana Department of Natural Resources, Guidelines for Deliniation of Floodways and Flood Hazard Areas, March 28, 1974.

50. State of Indiana, Indiana Department of Natural Resources, Indiana Flood Control Act, 1945, as amended.

51. Lake County Survey's Office, Storm Review Standards, (Stormwater Review Criteria), November 1971.



FLOOD PROFILES

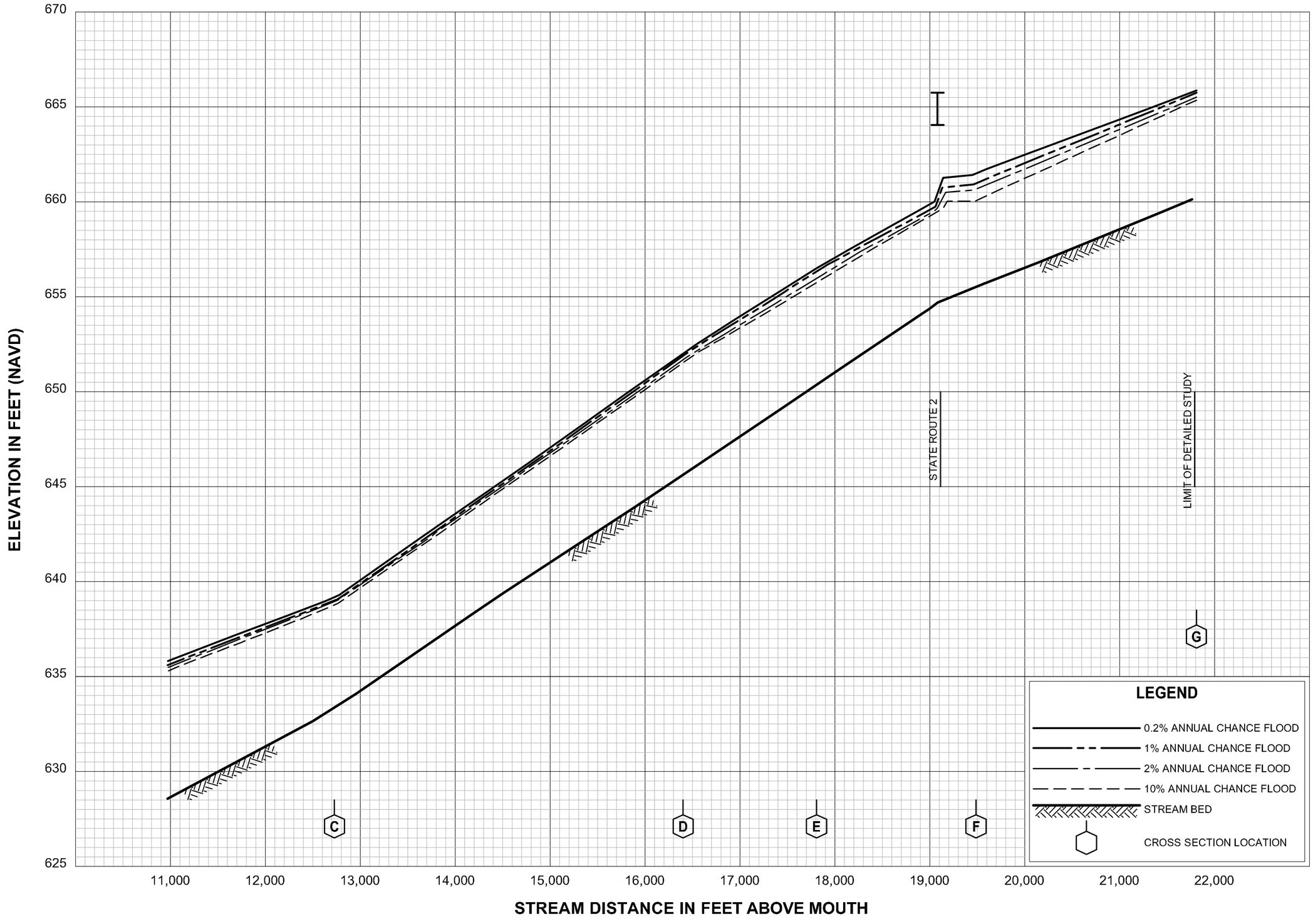
BAILEY DITCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

01P



FLOOD PROFILES

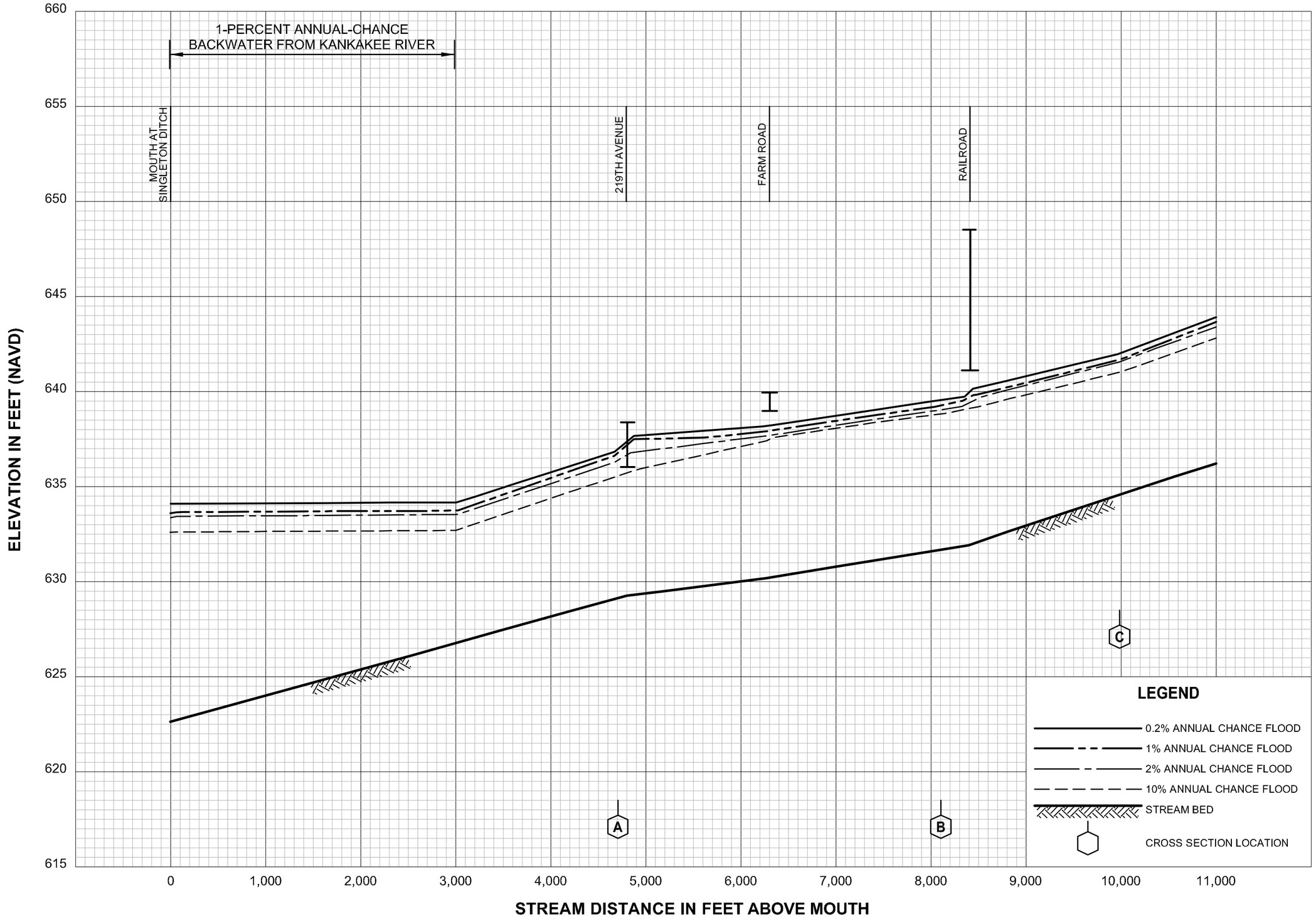
BAILEY DITCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

02P



FLOOD PROFILES

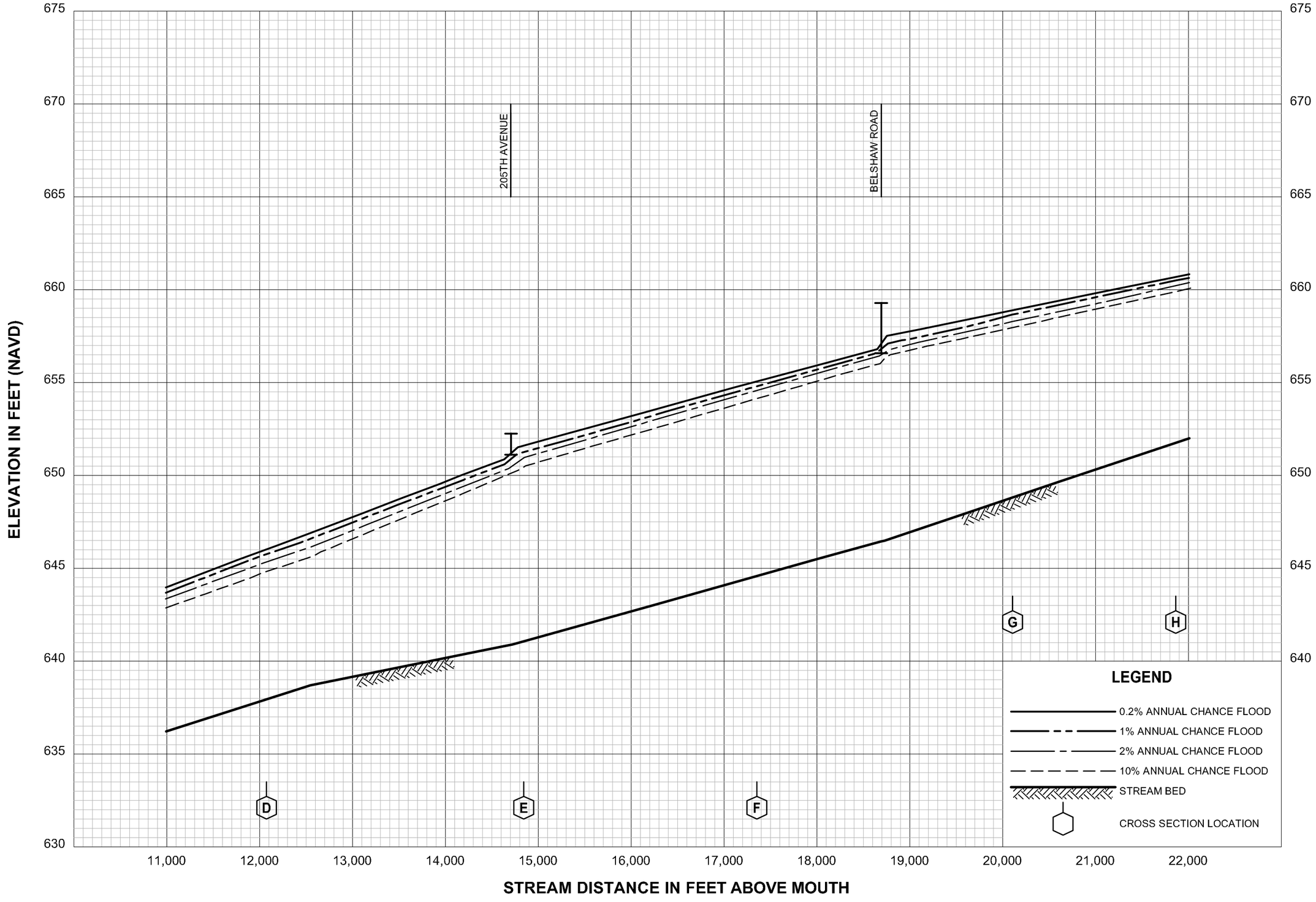
BRUCE DITCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

03P



FLOOD PROFILES

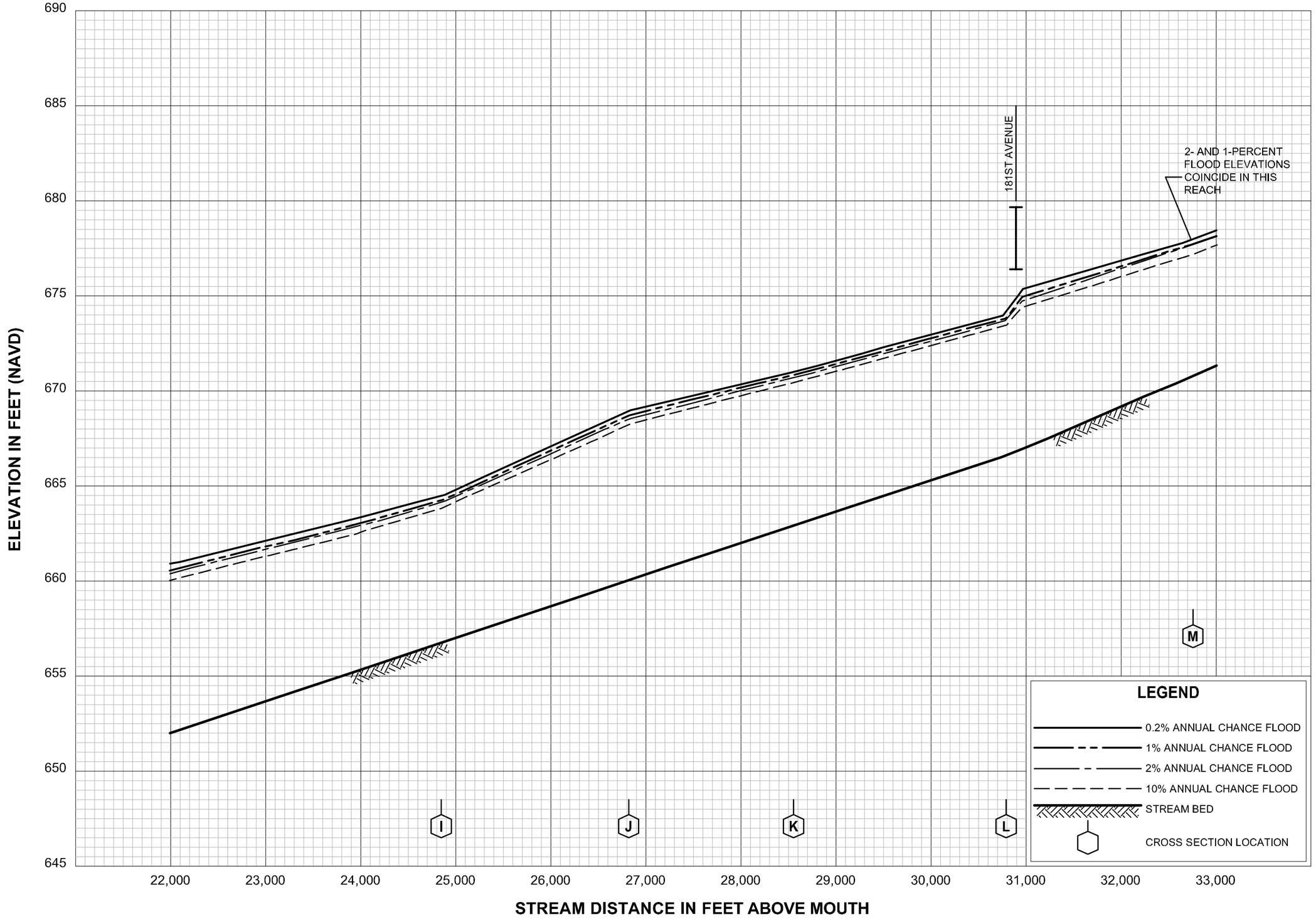
BRUCE DITCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

04P



FLOOD PROFILES

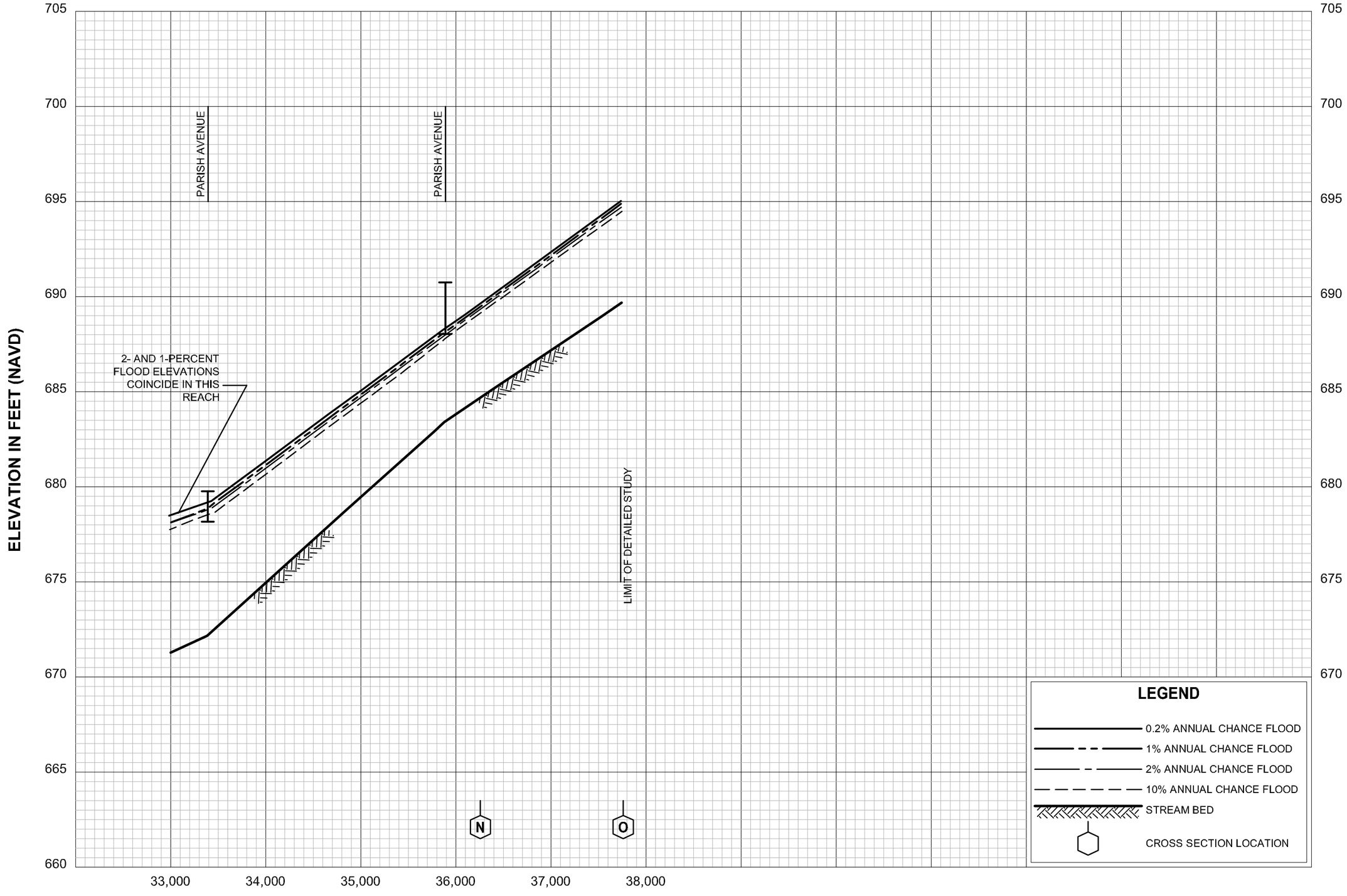
BRUCE DITCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

05P



FLOOD PROFILES

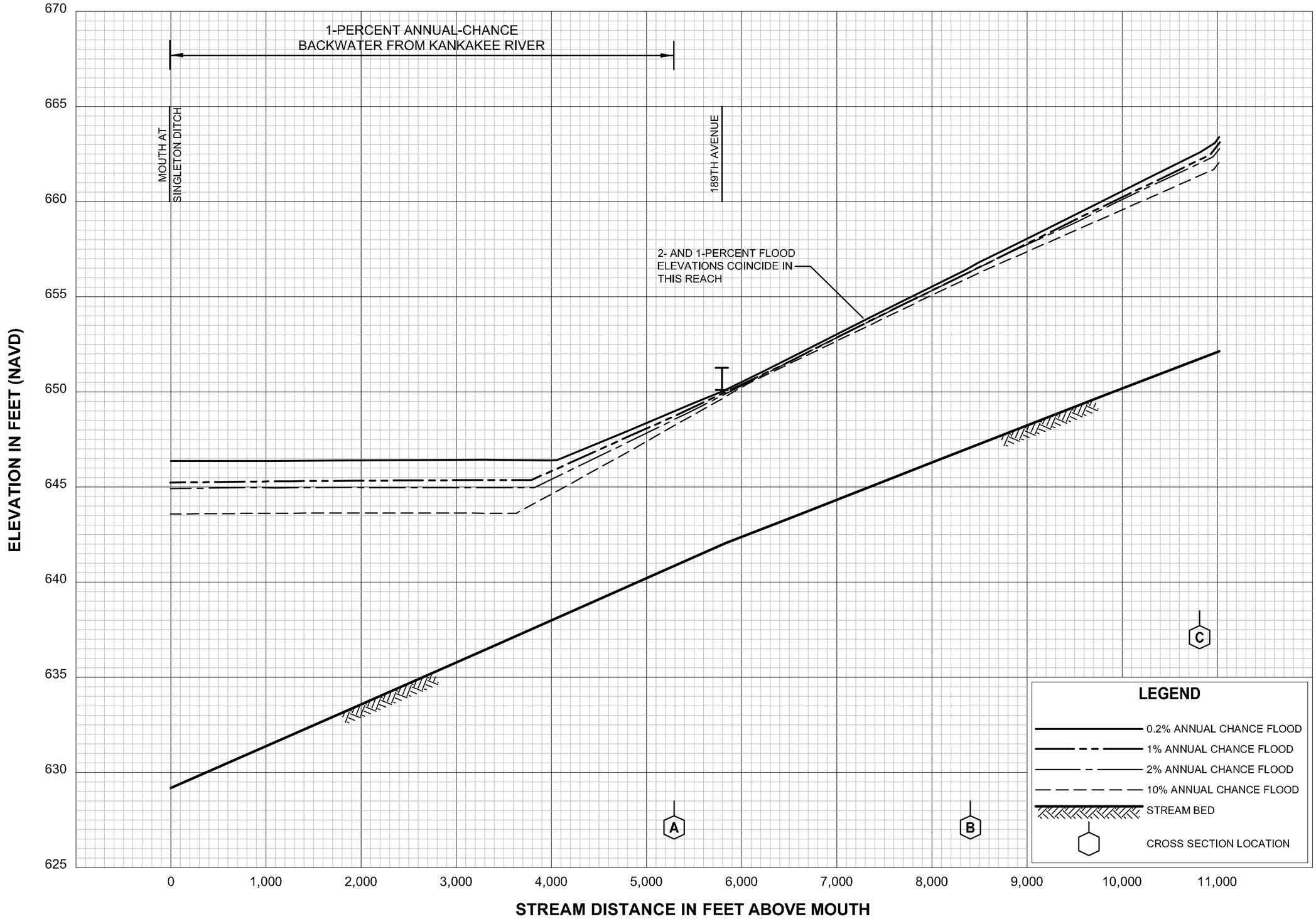
BRUCE DITCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

06P



FLOOD PROFILES

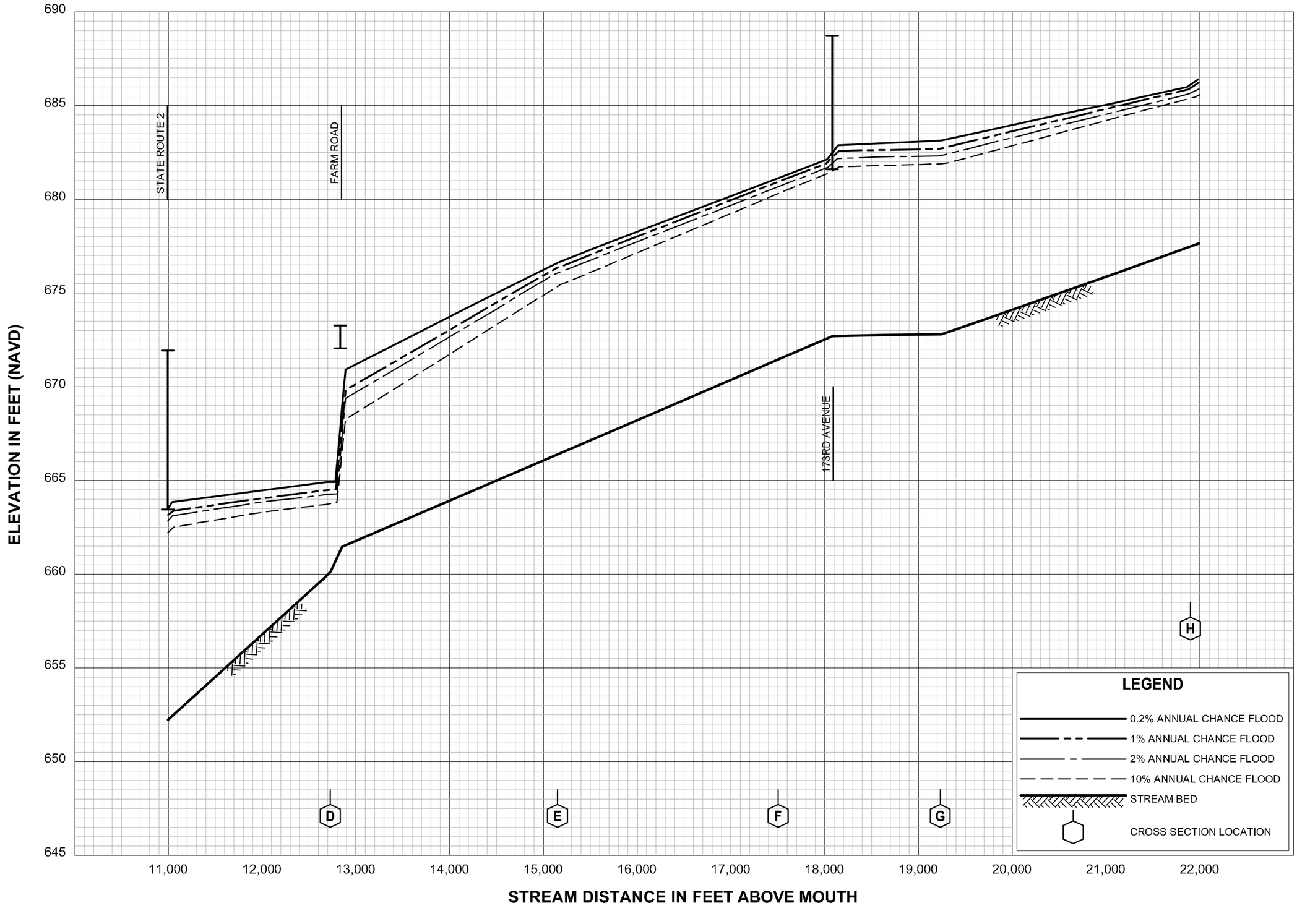
BRYANT DITCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

07P



FLOOD PROFILES

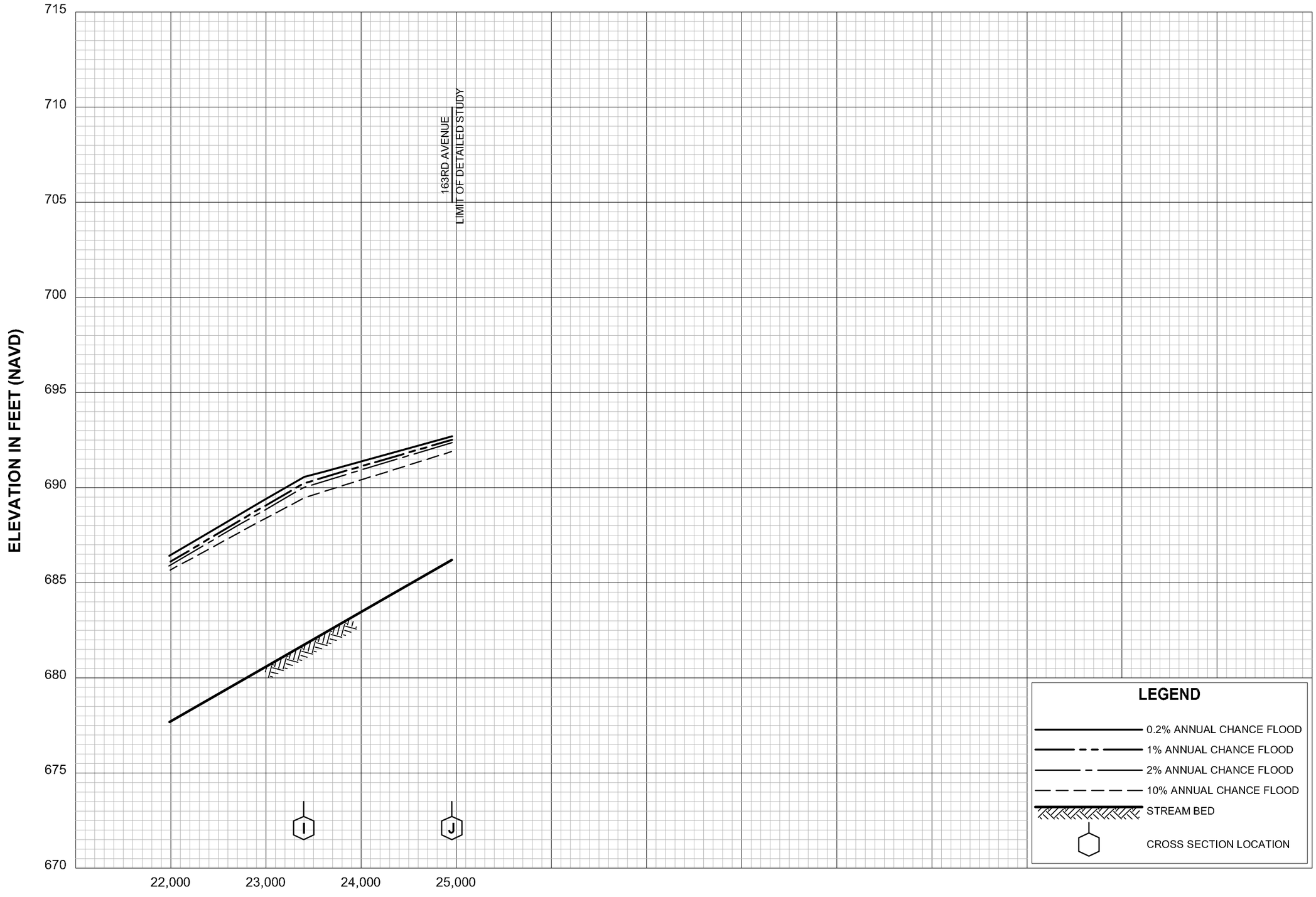
BRYANT DITCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

08P



ELEVATION IN FEET (NAVD)

STREAM DISTANCE IN FEET ABOVE MOUTH

FLOOD PROFILES

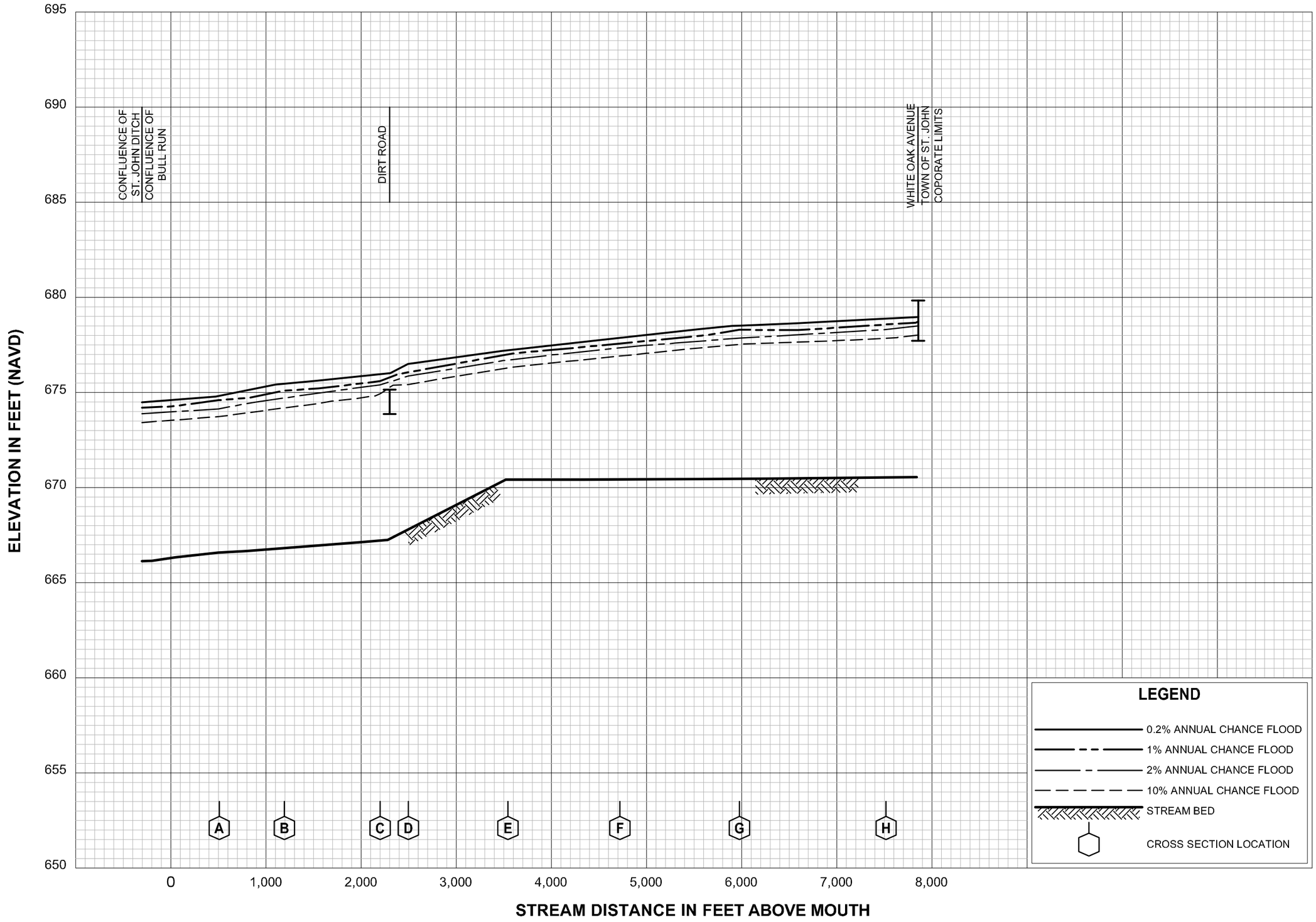
BRYANT DITCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

09P



FLOOD PROFILES

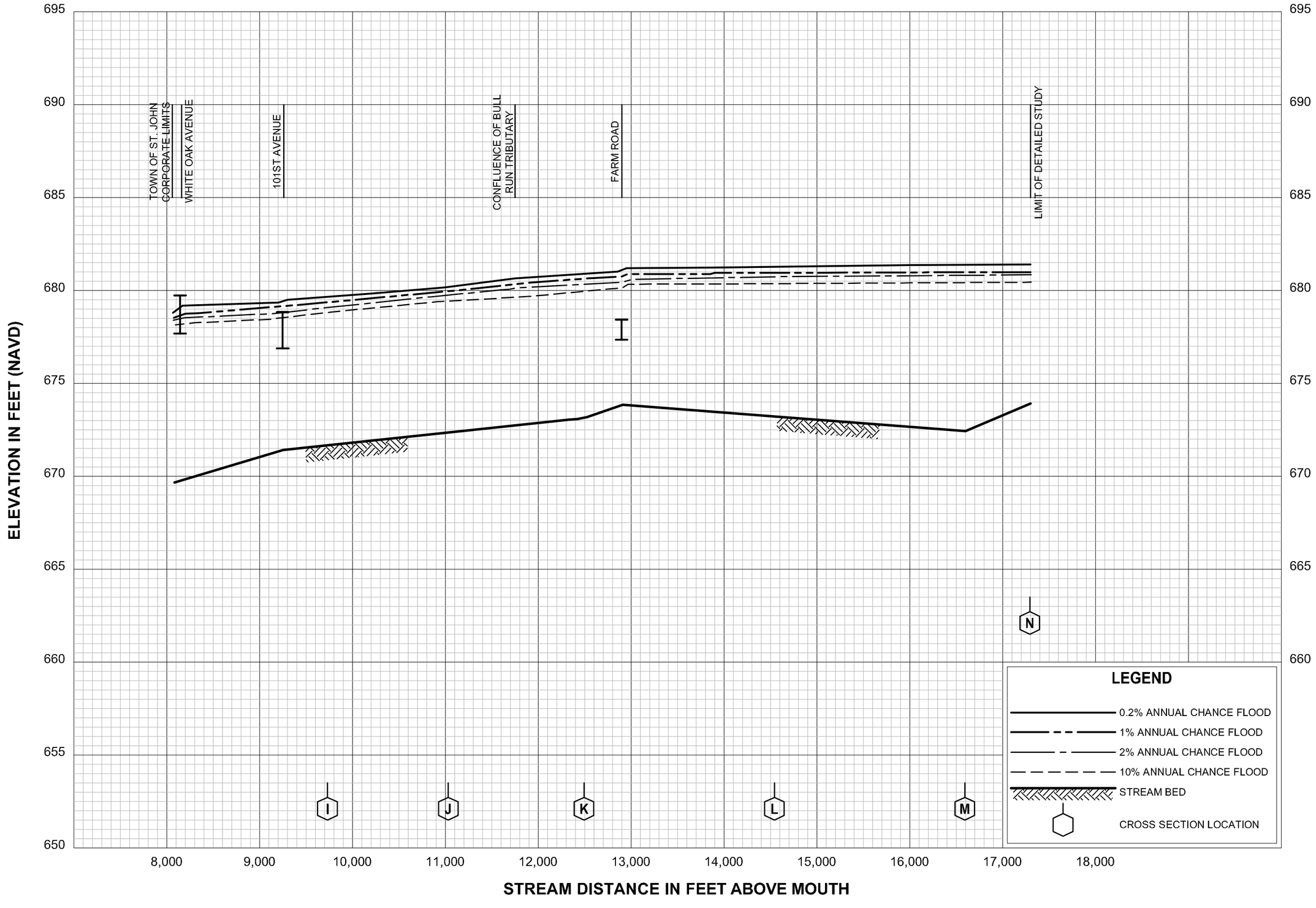
BULL RUN

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

10P



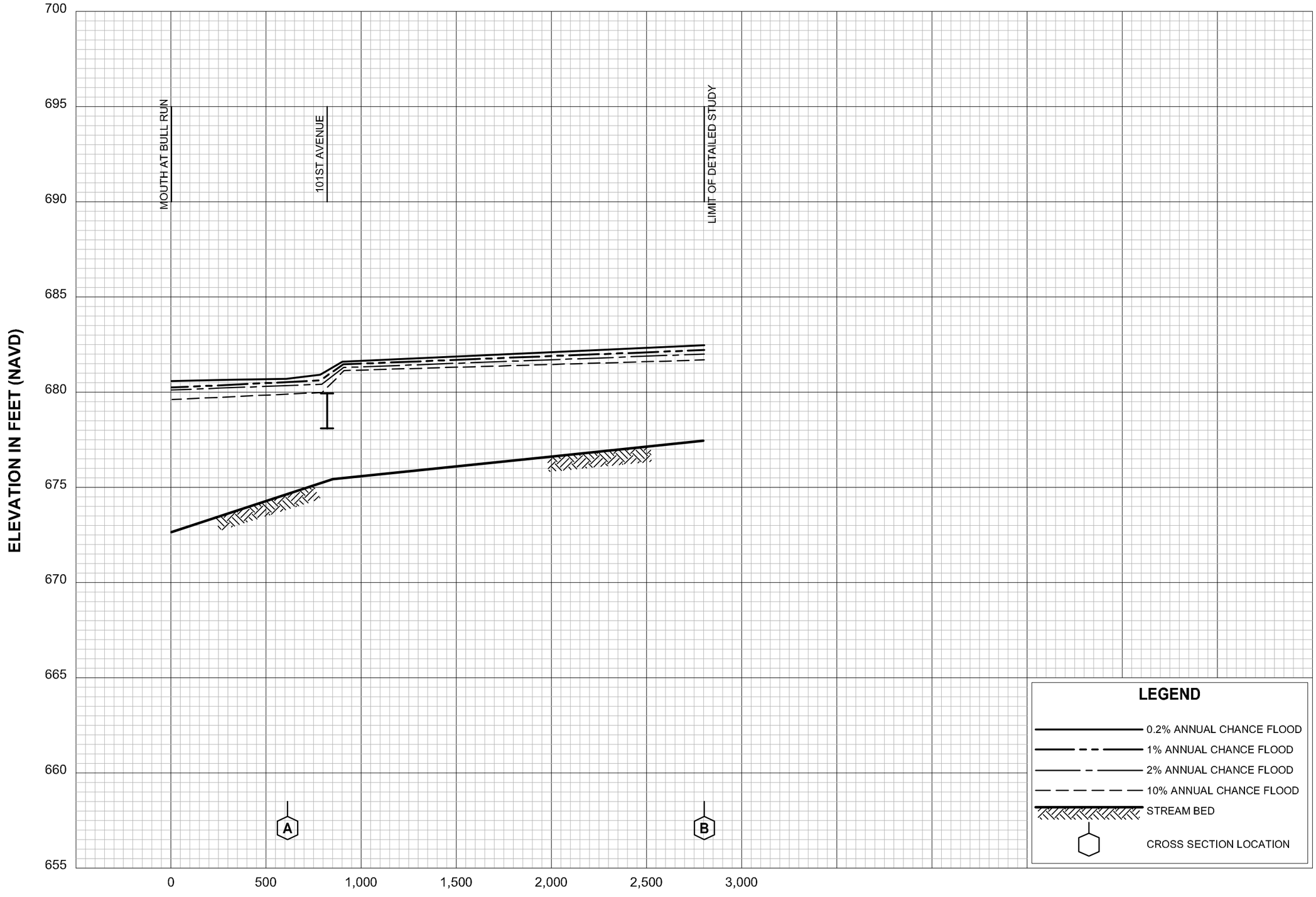
FLOOD PROFILES

BULL RUN

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS



FLOOD PROFILES

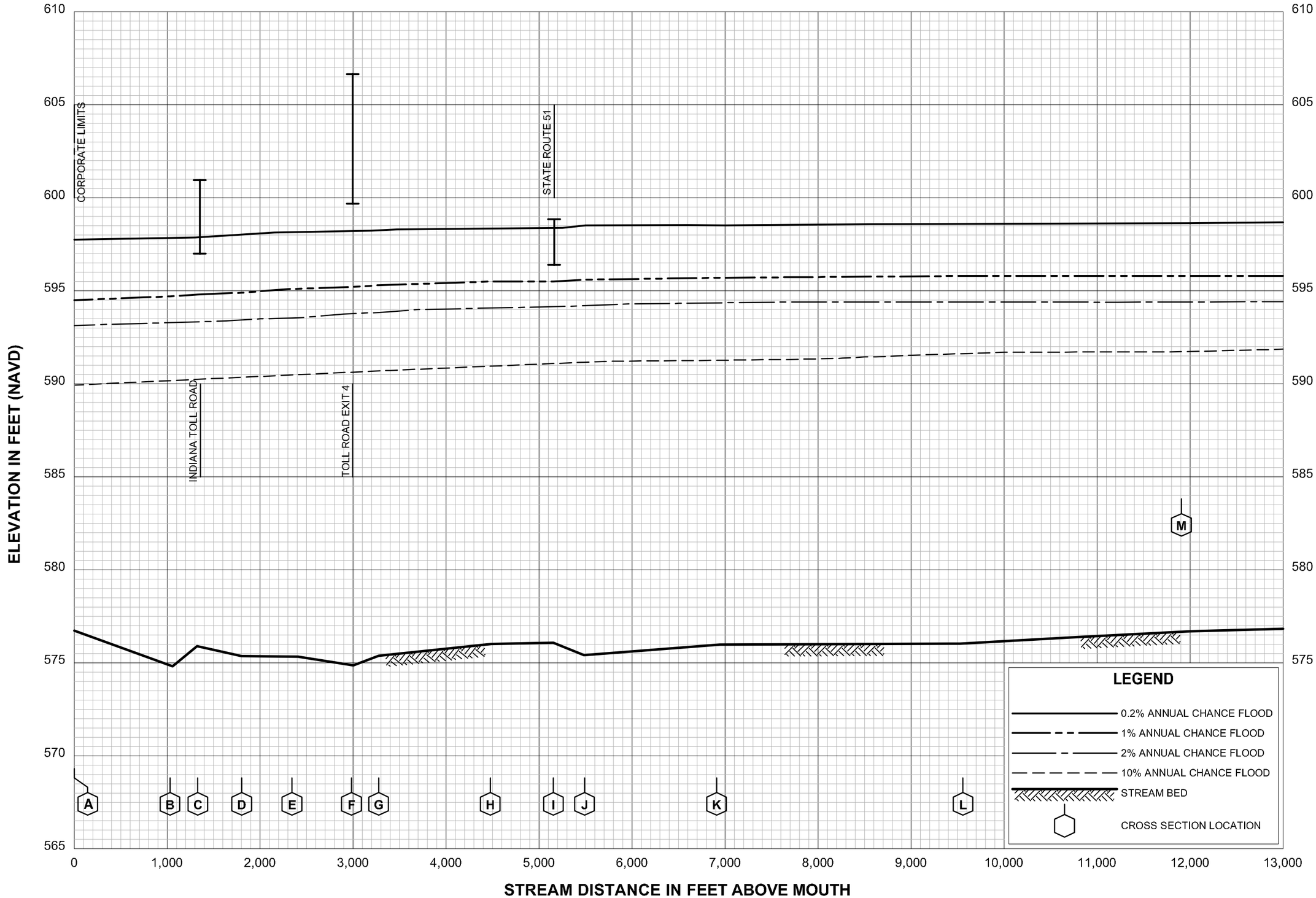
BULL RUN TRIBUTARY

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

12P



FLOOD PROFILES

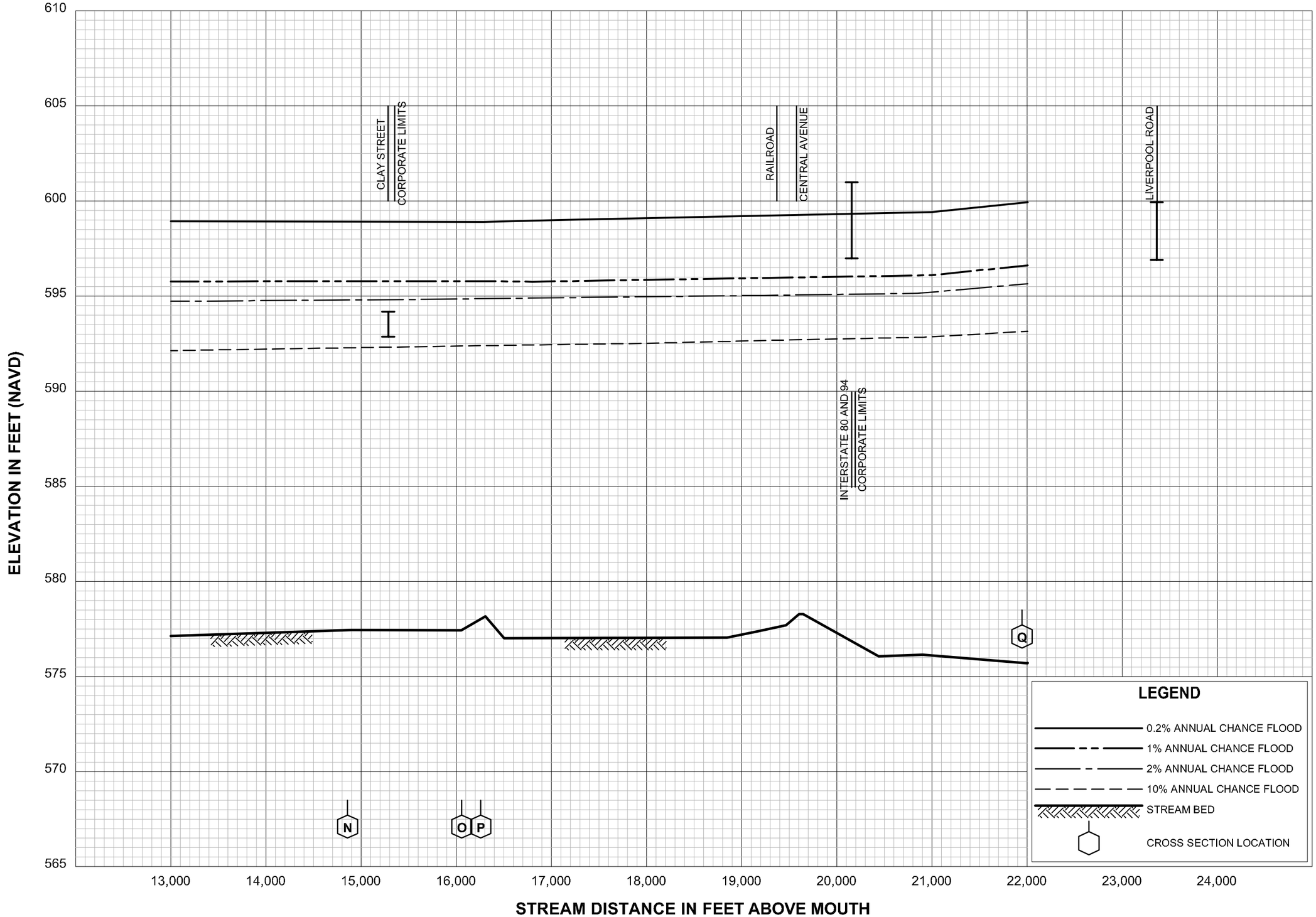
BURNS DITCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

13P



FLOOD PROFILES

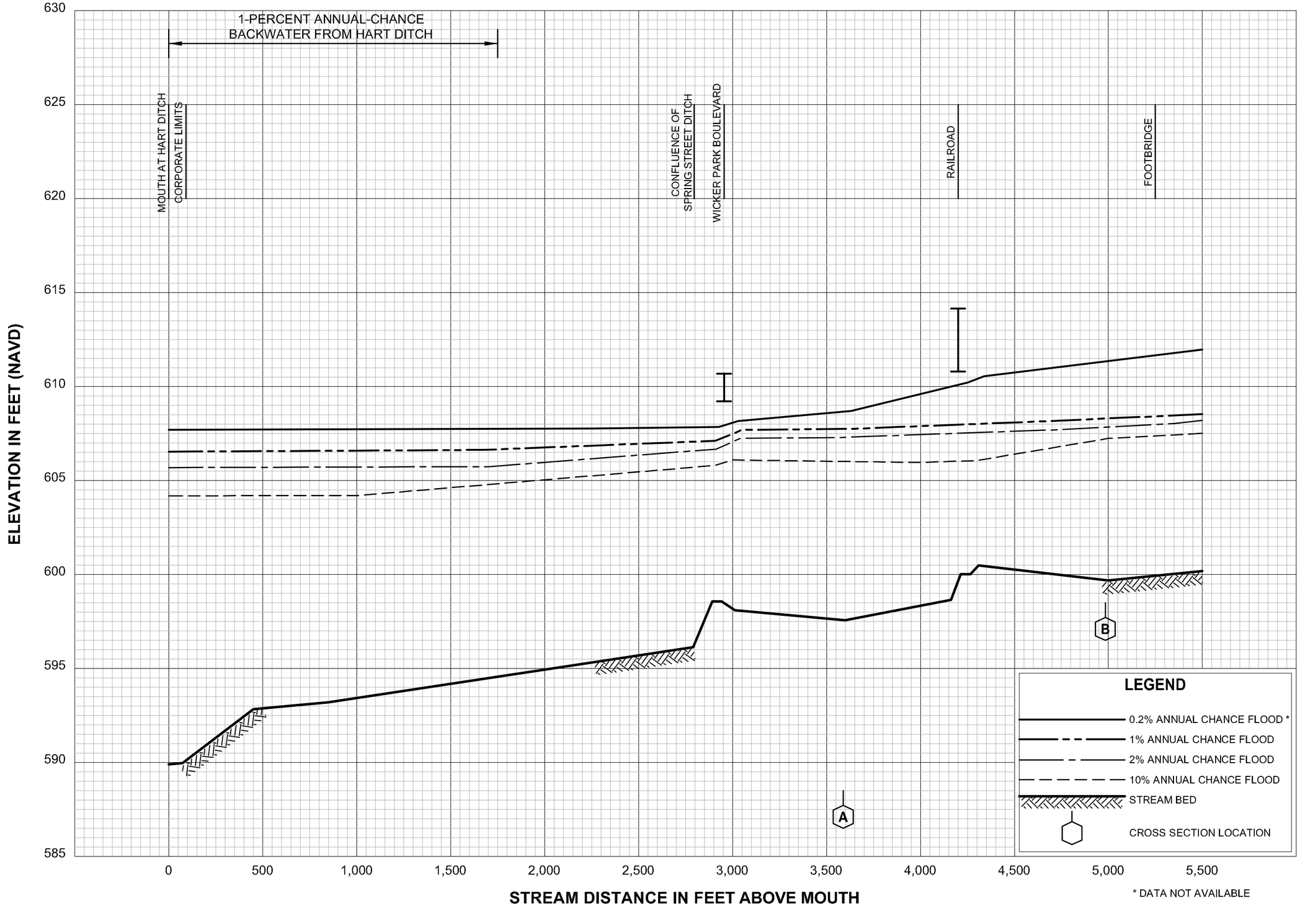
BURNS DITCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

14P



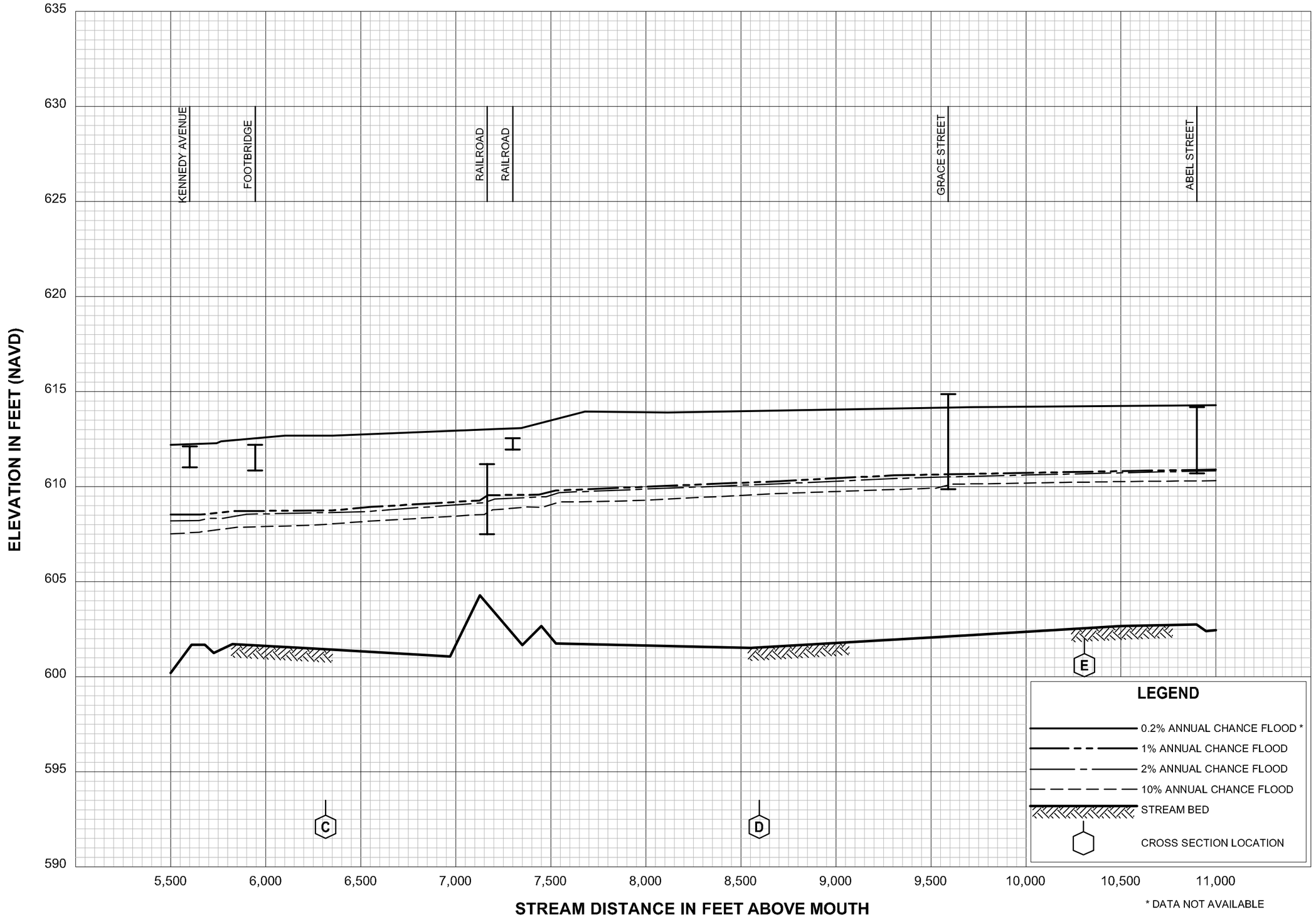
FLOOD PROFILES

CADY MARSH DITCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS



FLOOD PROFILES

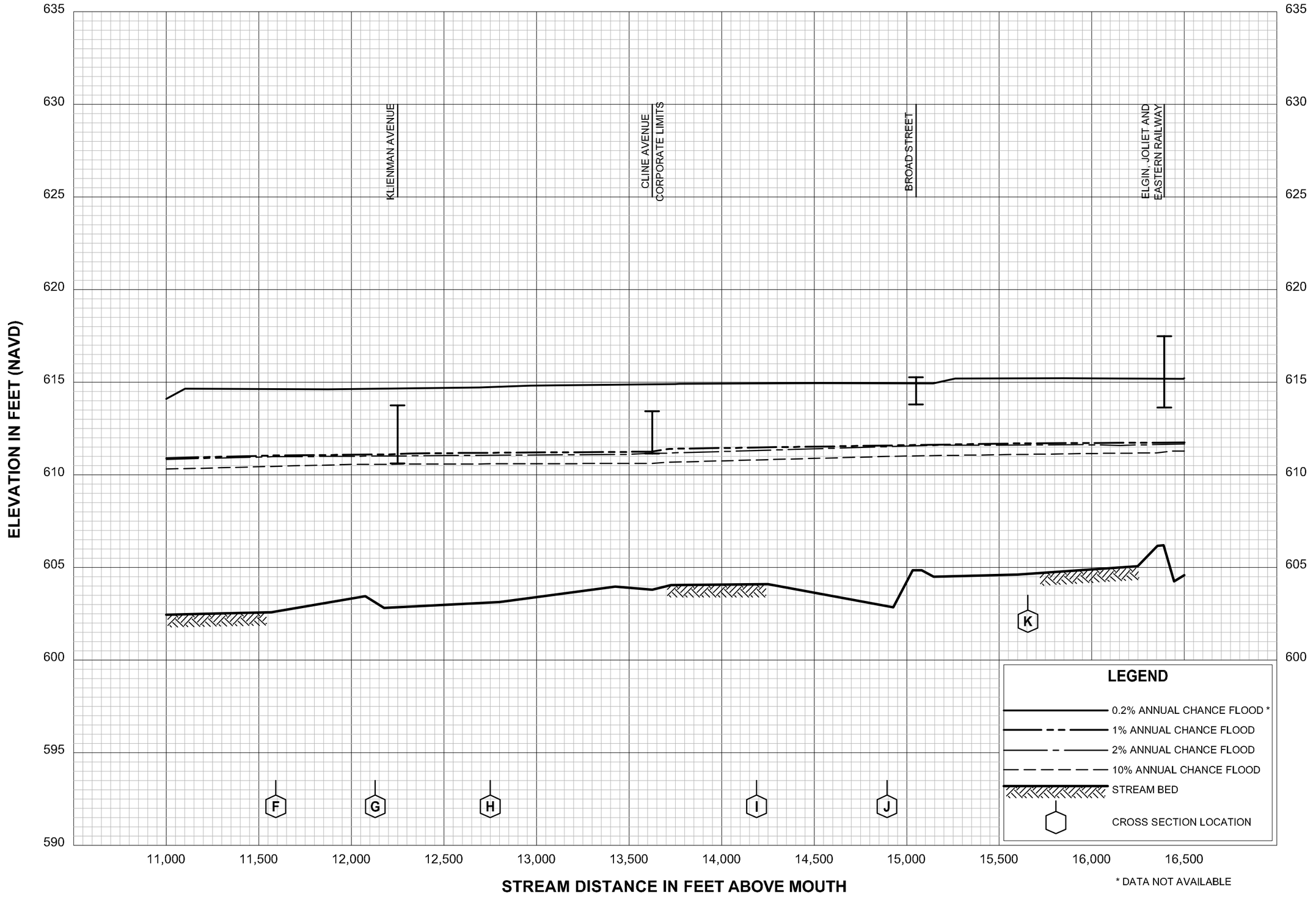
CADY MARSH DITCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

16P



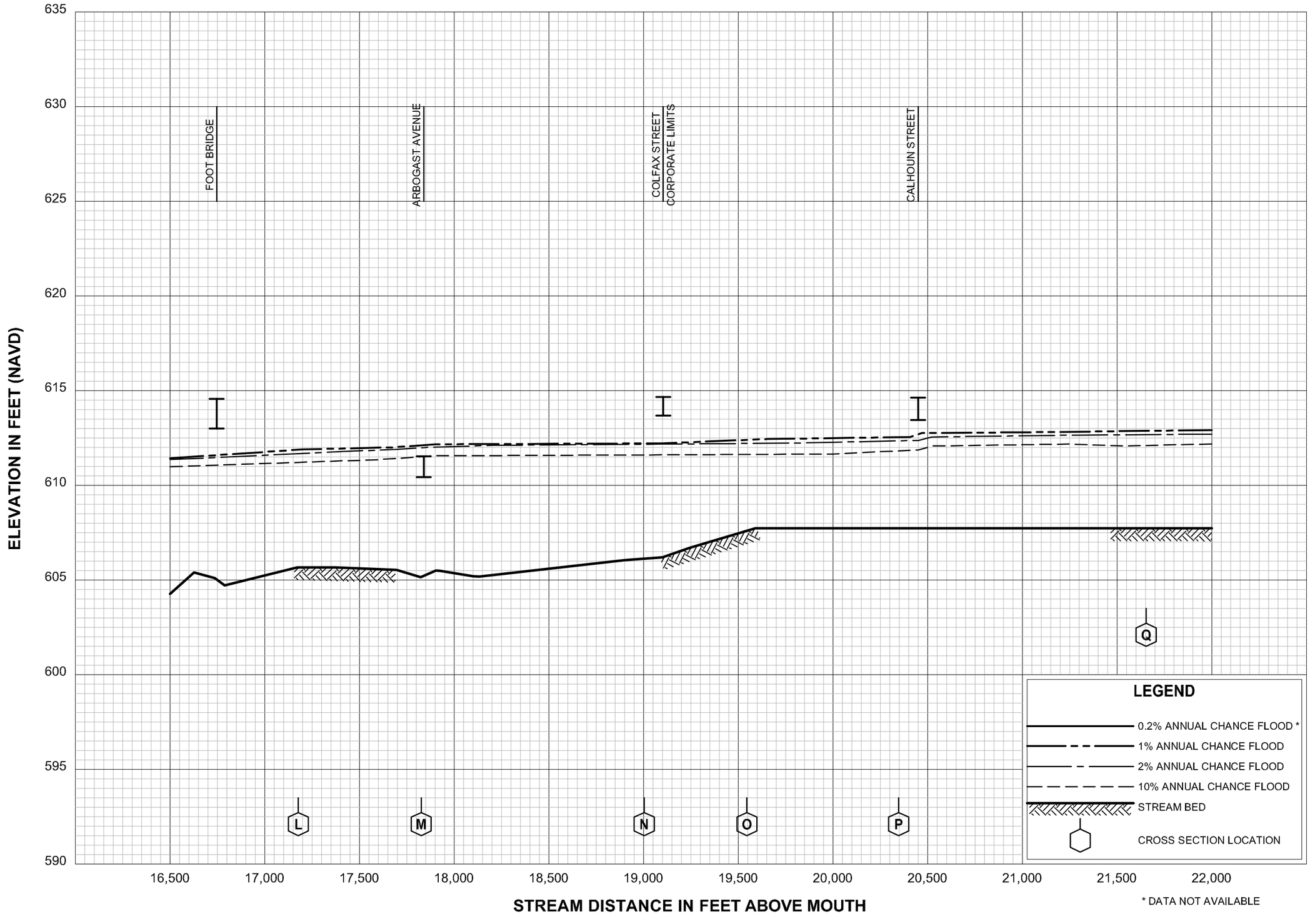
FLOOD PROFILES

CADY MARSH DITCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS



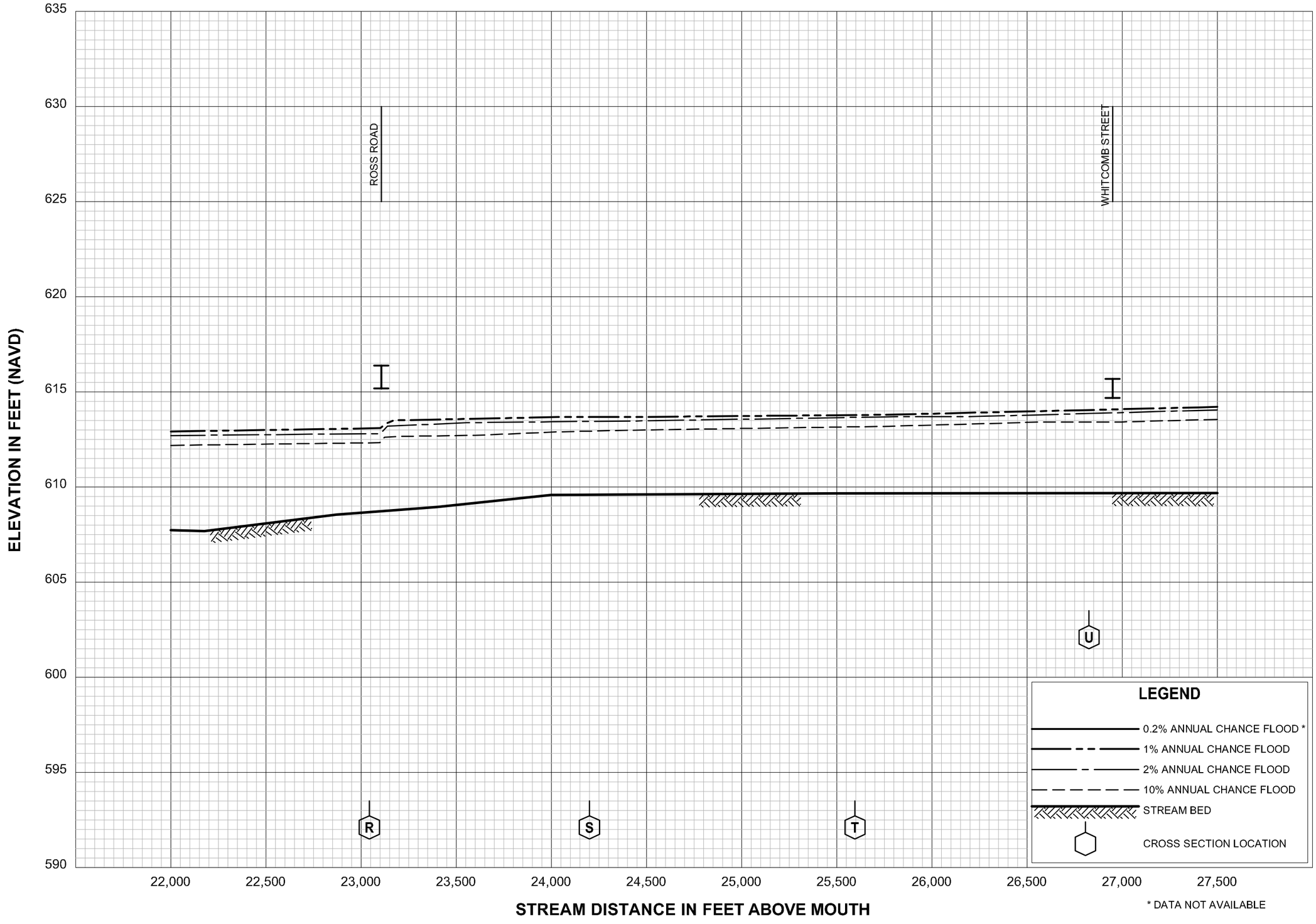
FLOOD PROFILES

CADY MARSH DITCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS



FLOOD PROFILES

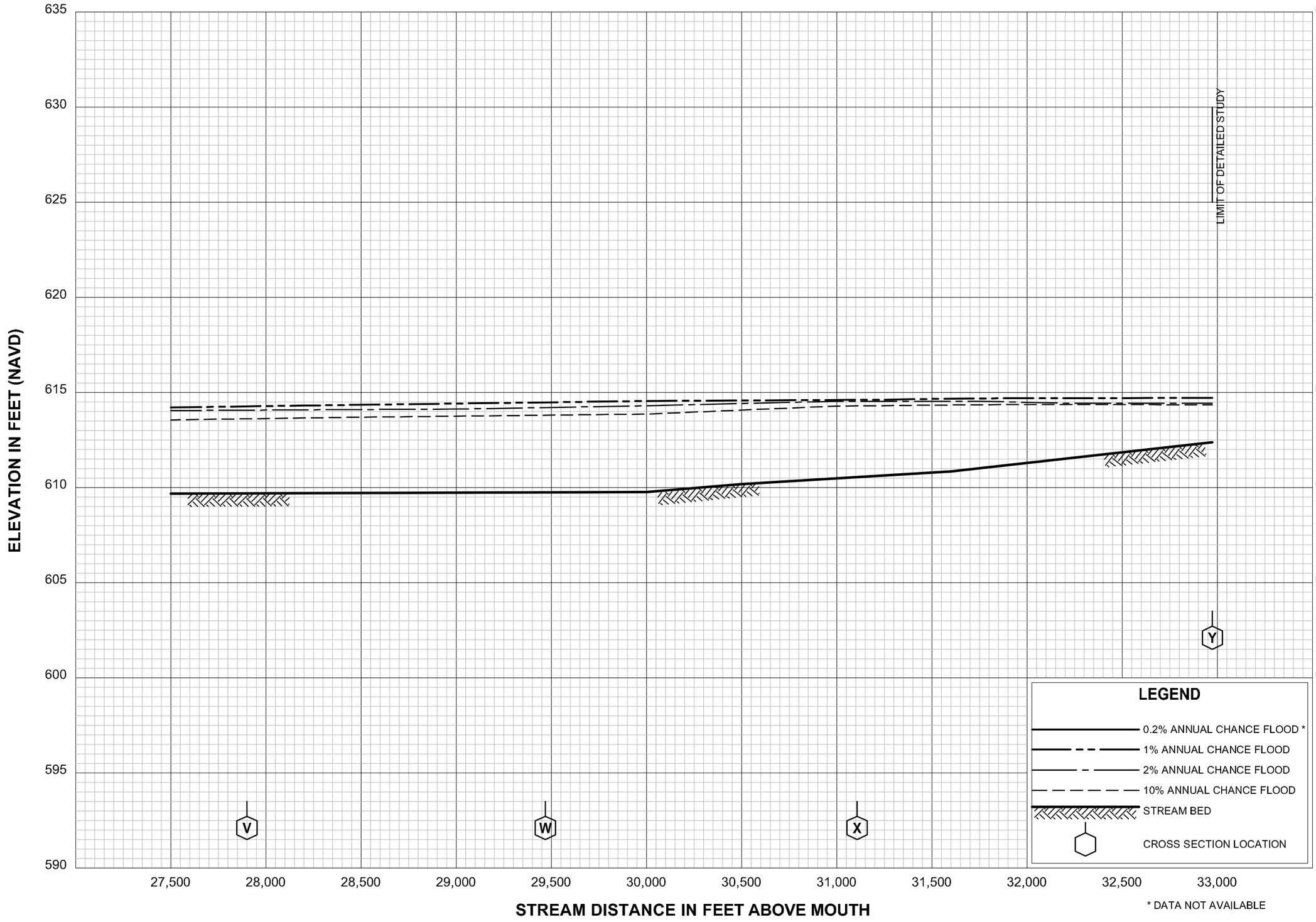
CADY MARSH DITCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

19P



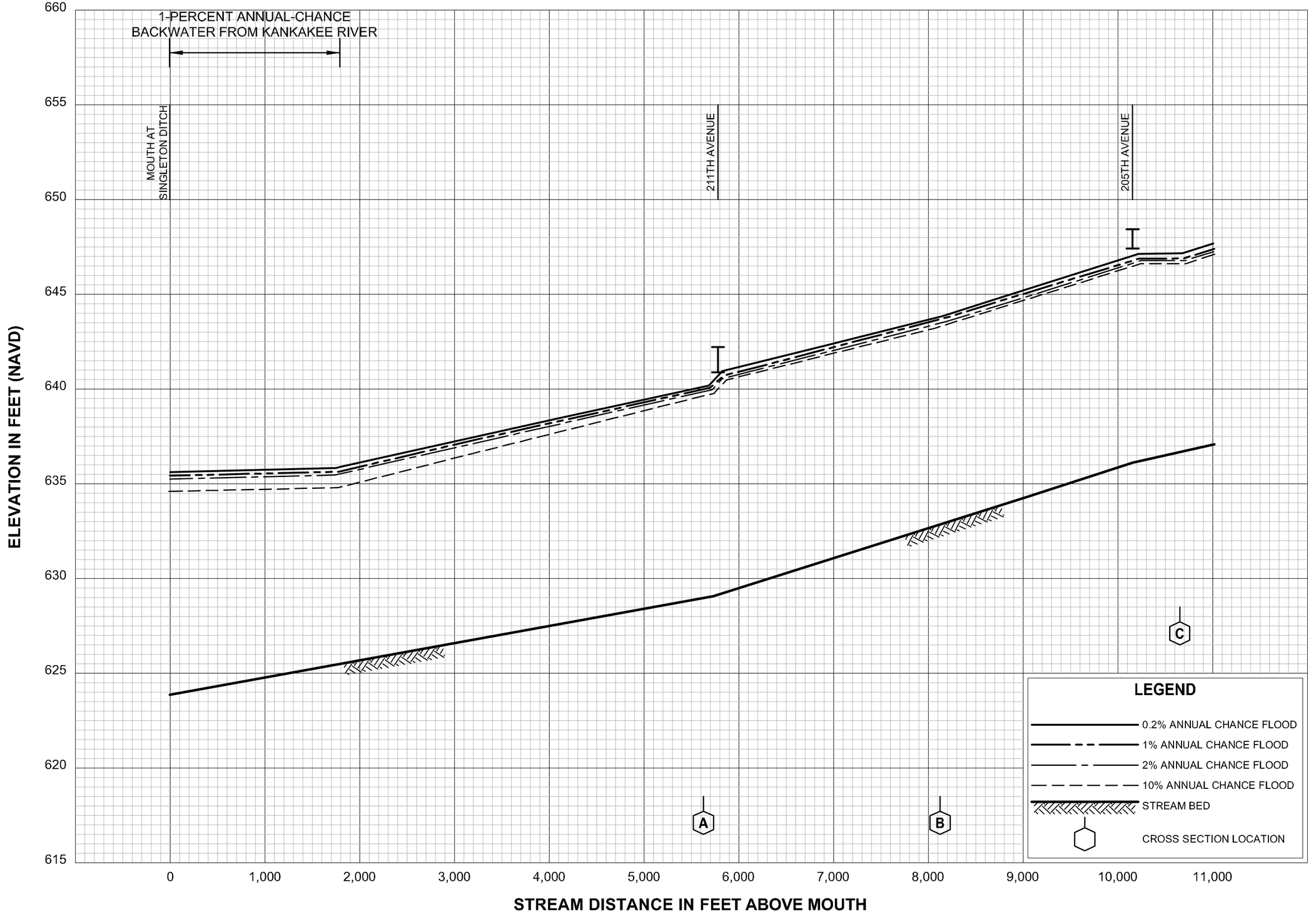
FLOOD PROFILES

CADY MARSH DITCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS



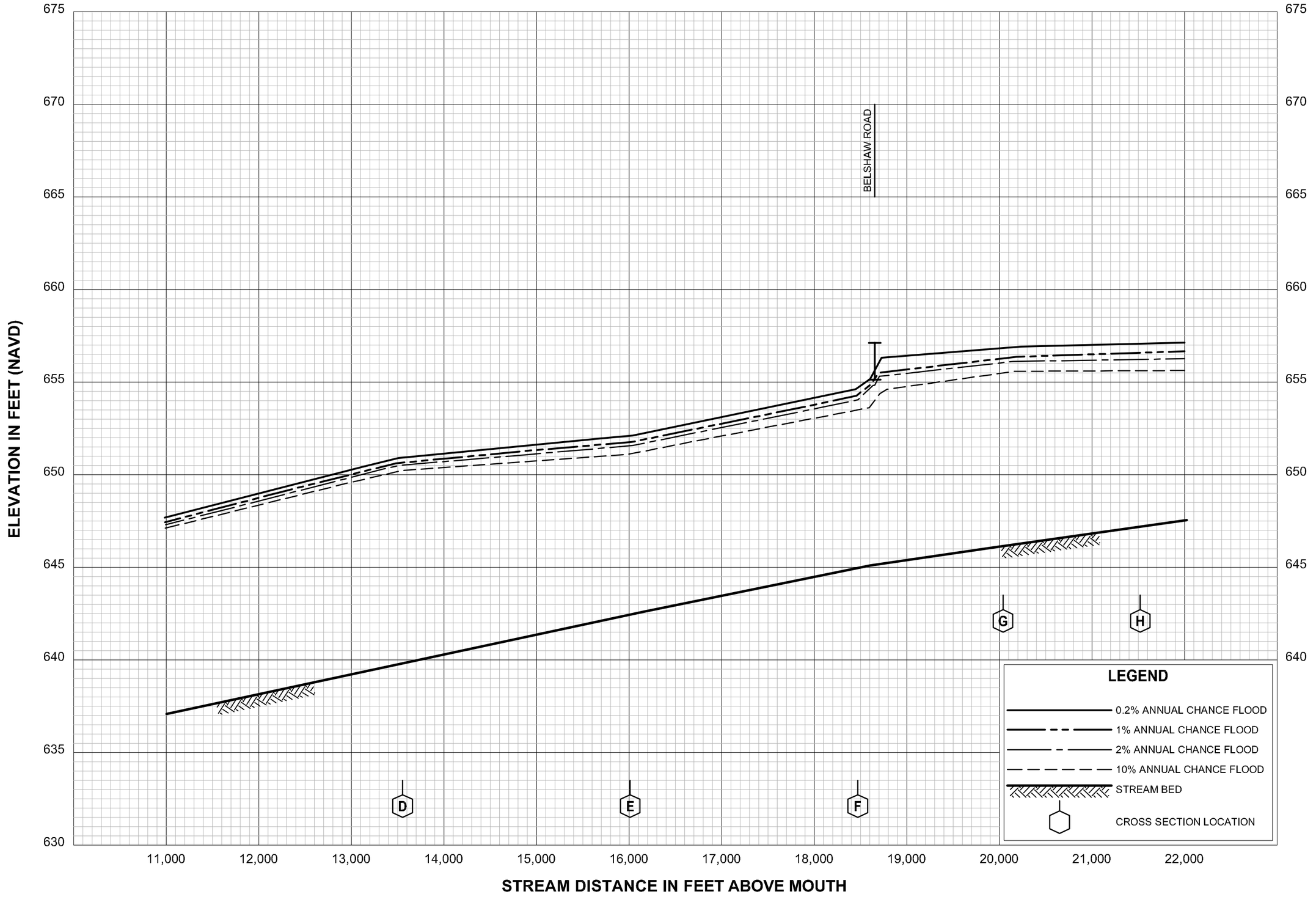
FLOOD PROFILES

CEDAR CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS



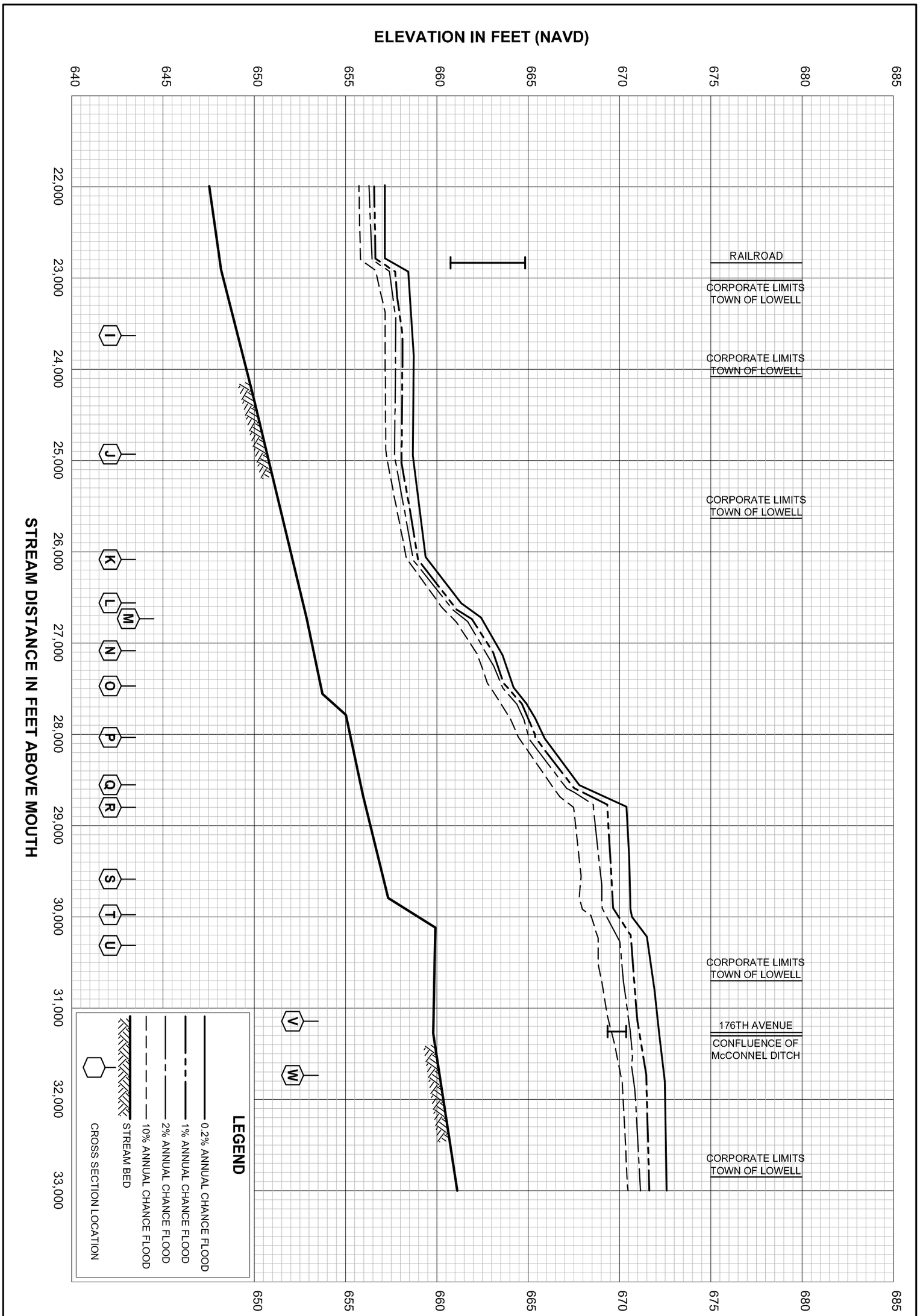
FLOOD PROFILES

CEDAR CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS



23P

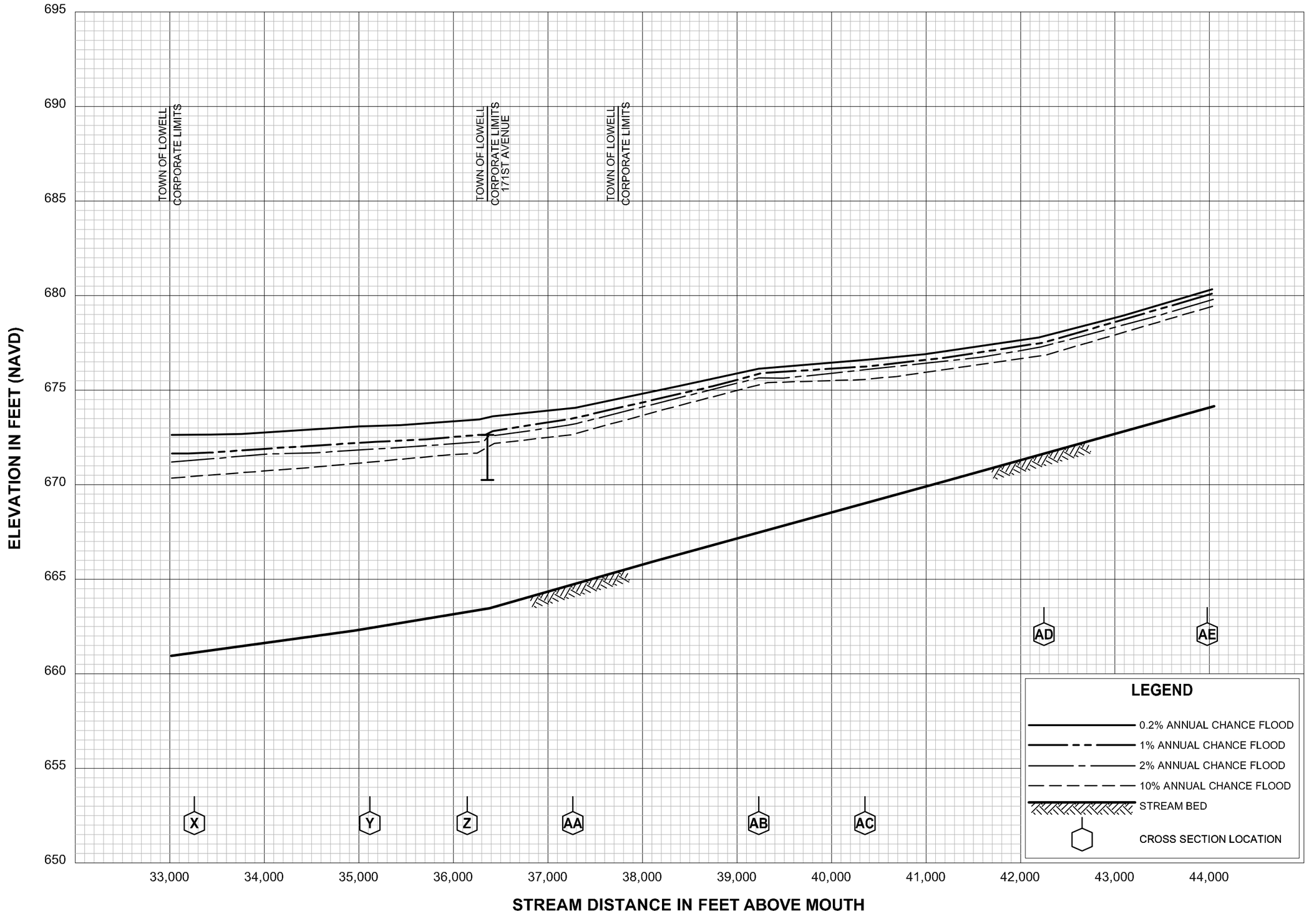
FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

FLOOD PROFILES

CEDAR CREEK



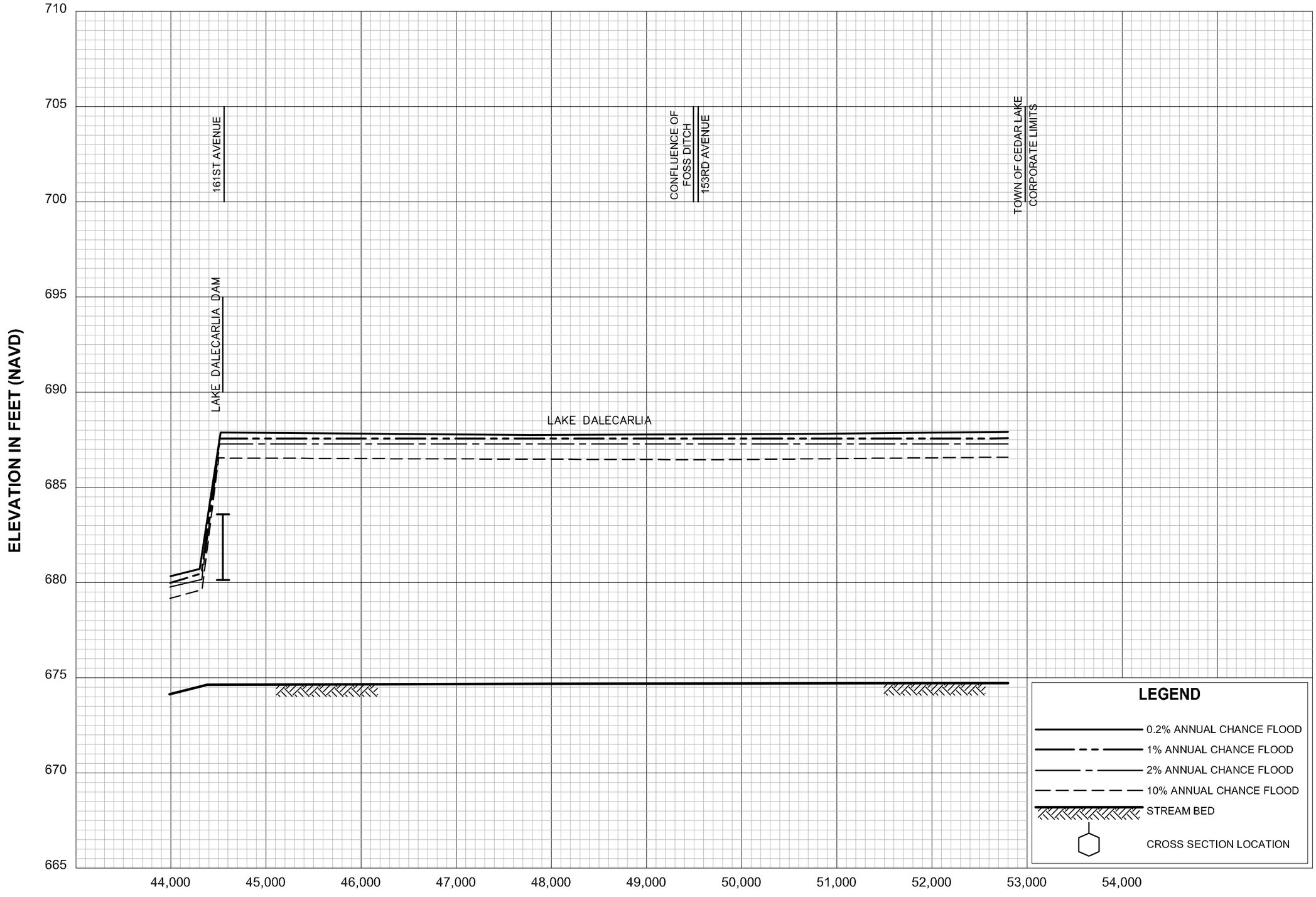
FLOOD PROFILES

CEDAR CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS



FLOOD PROFILES

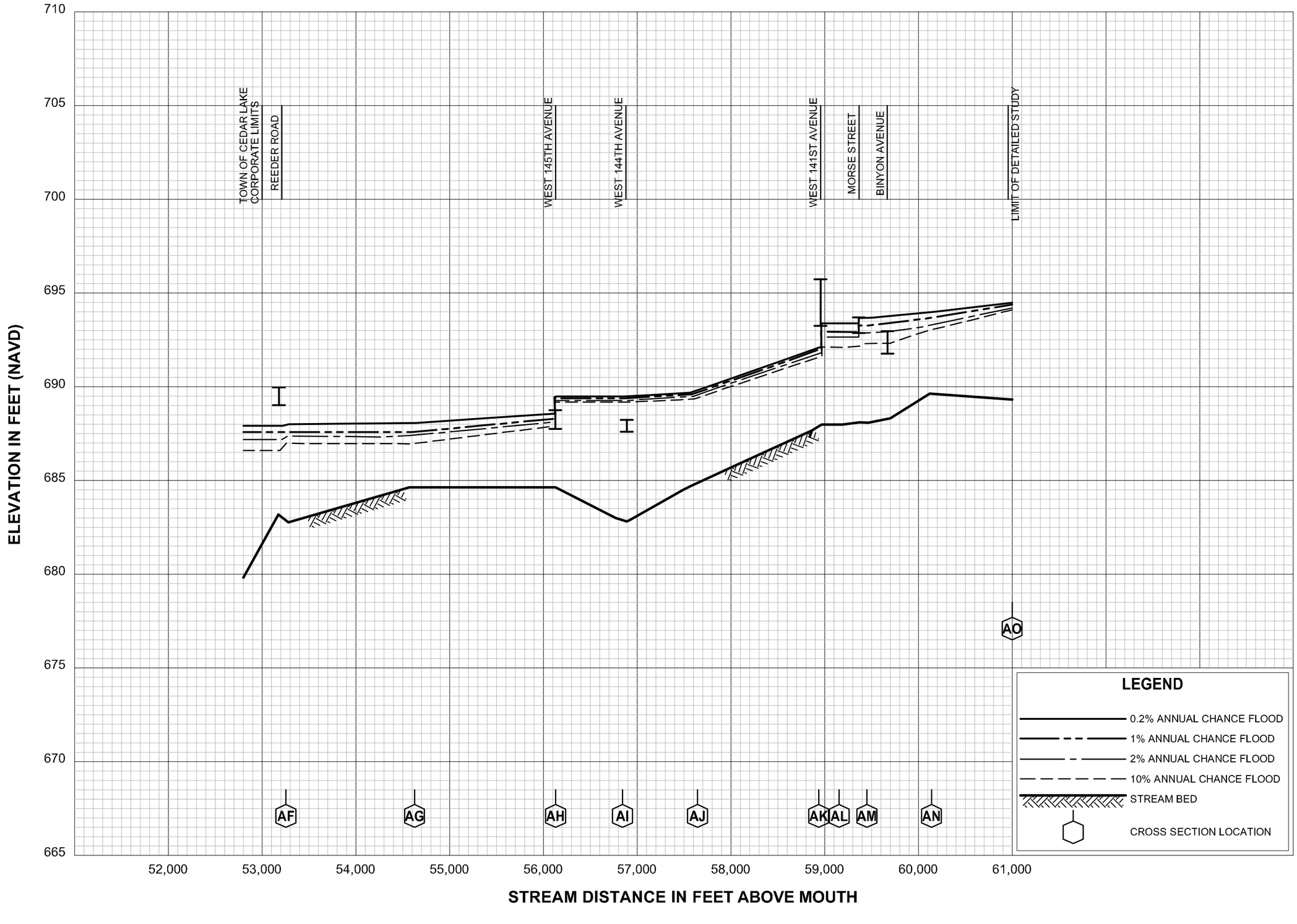
CEDAR CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

25P



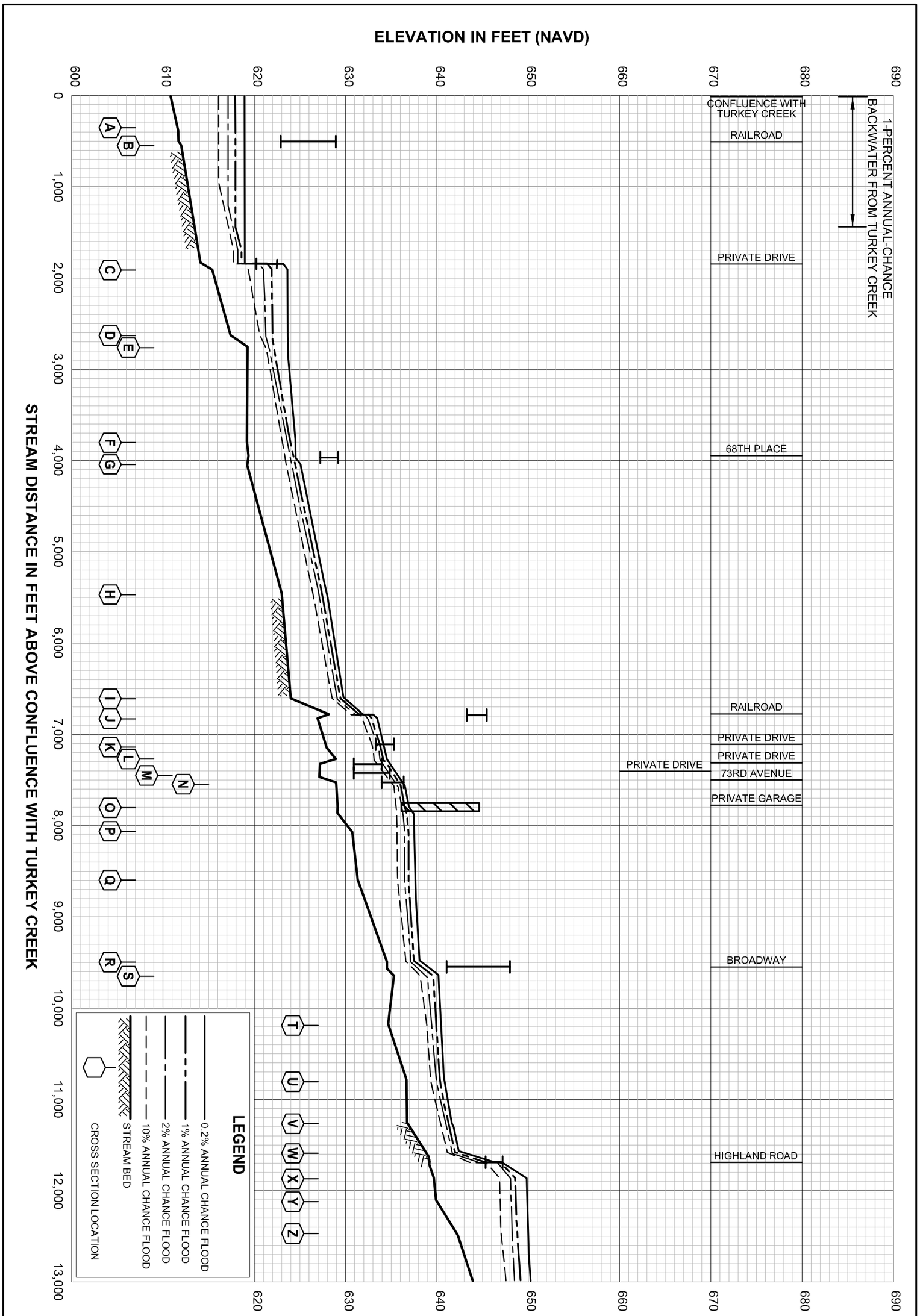
FLOOD PROFILES

CEDAR CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS



FEDERAL EMERGENCY MANAGEMENT AGENCY

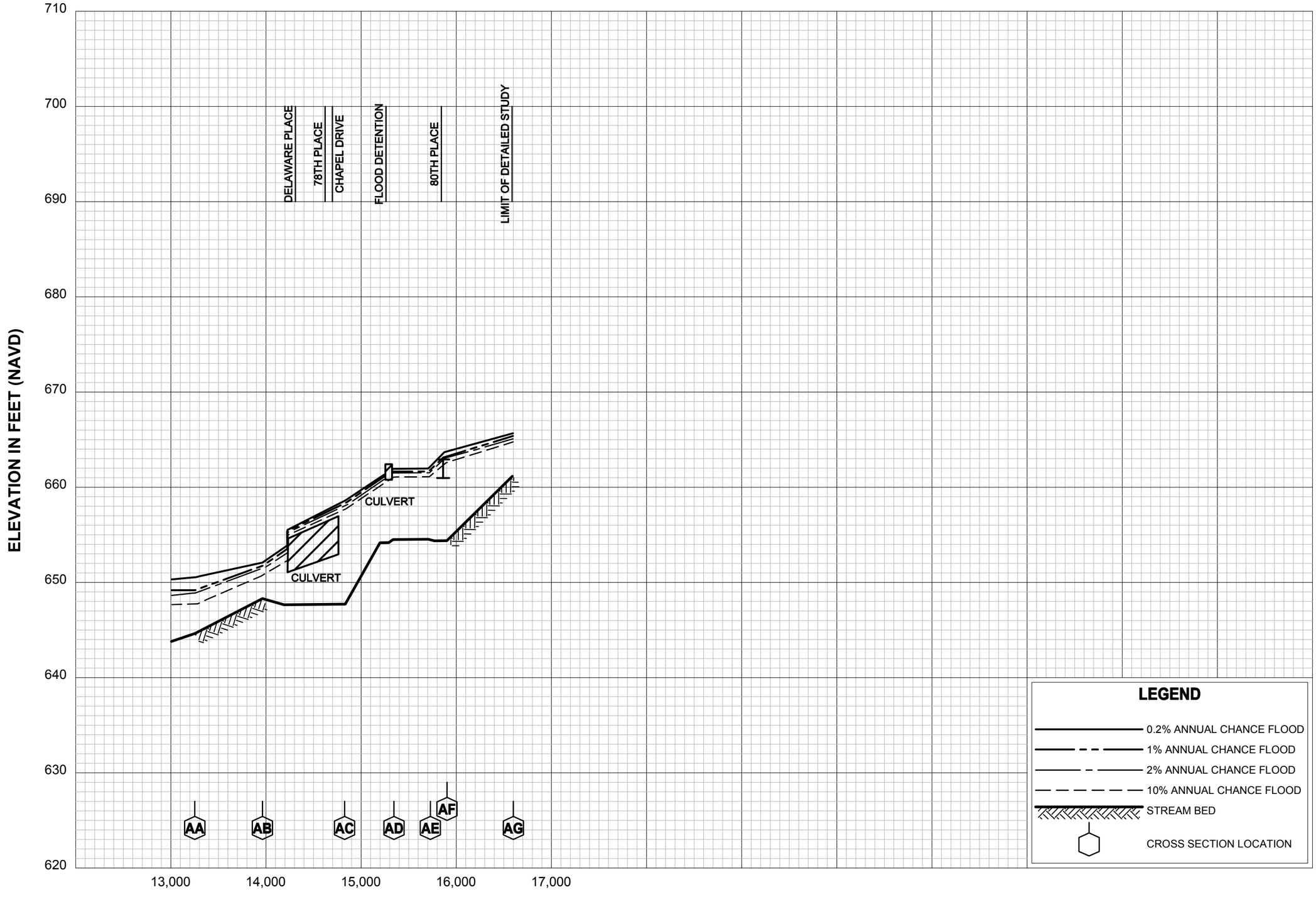
LAKE COUNTY, IN

AND INCORPORATED AREAS

FLOOD PROFILES

CHAPEL MANOR LATERAL

27P



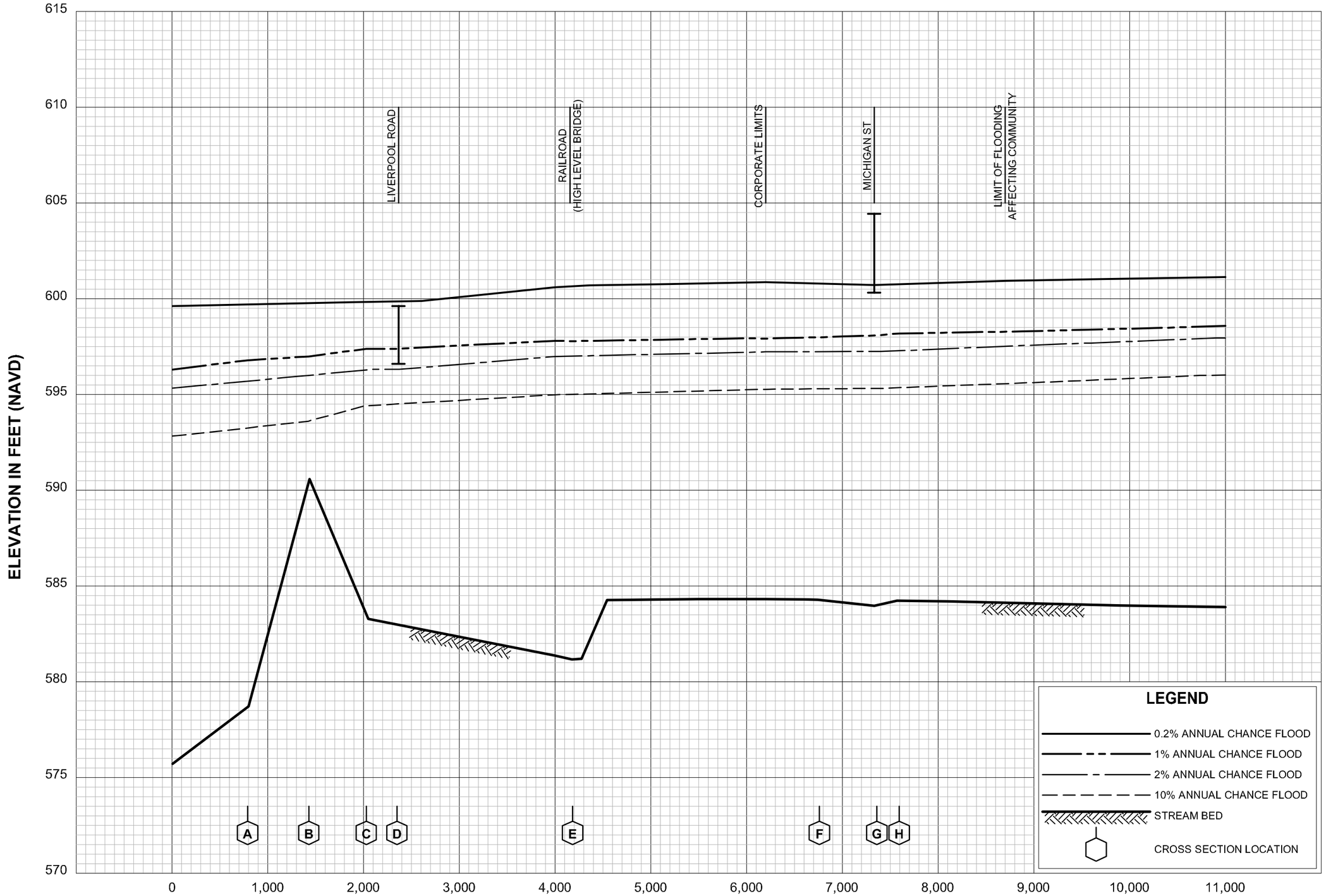
FLOOD PROFILES

CHAPEL MANOR LATERAL

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS



FLOOD PROFILES

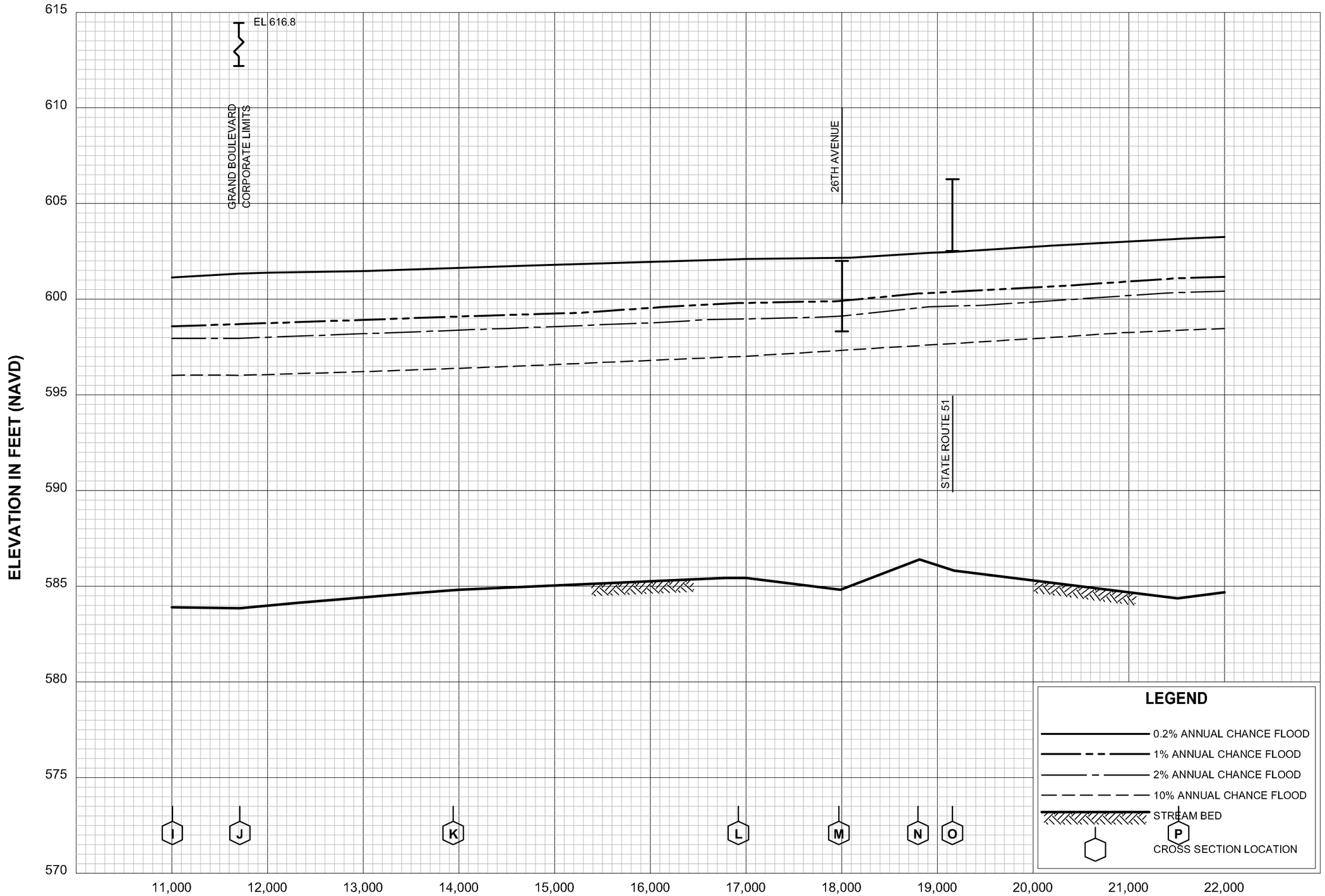
DEEP RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

29P



FLOOD PROFILES

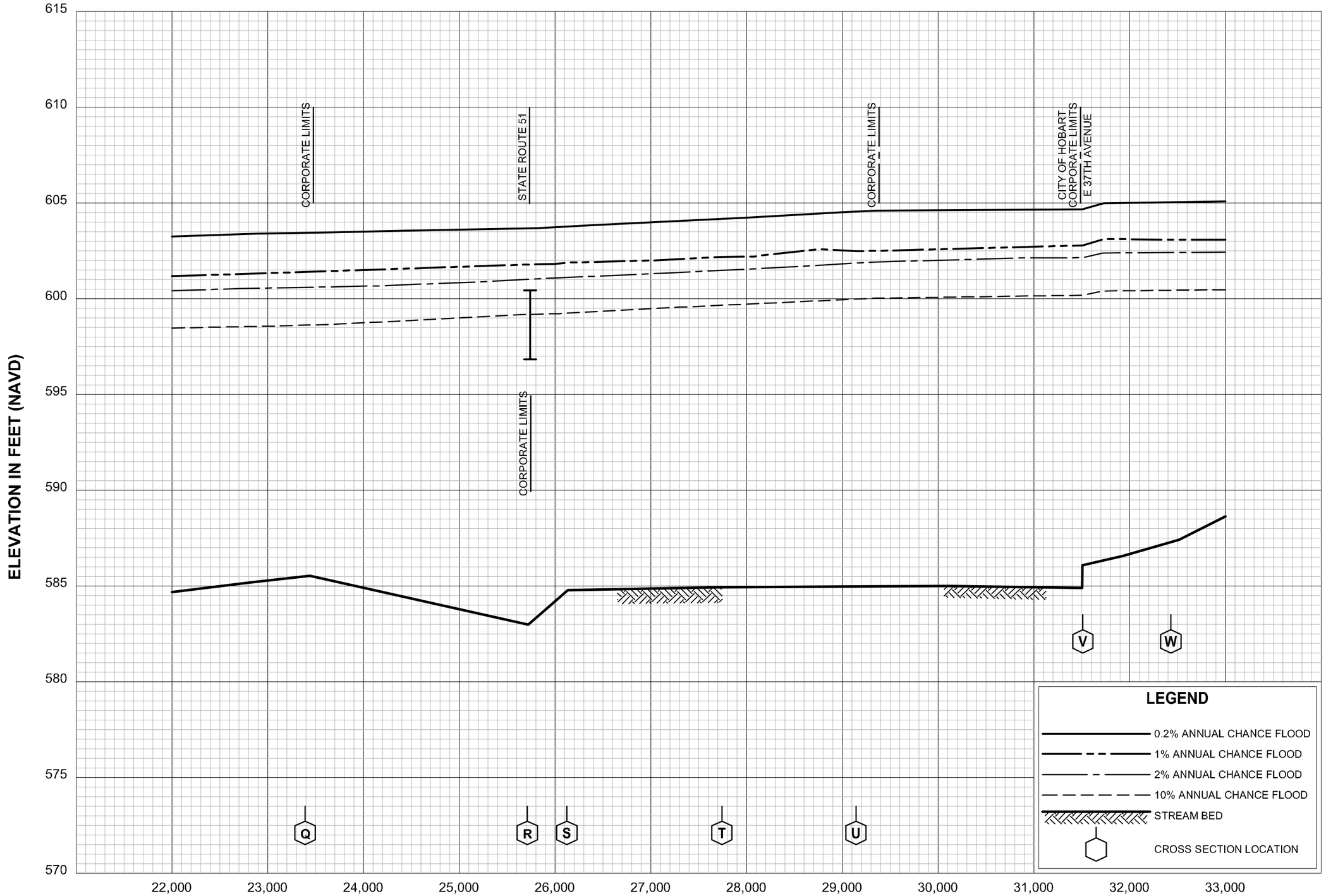
DEEP RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

30P



FLOOD PROFILES

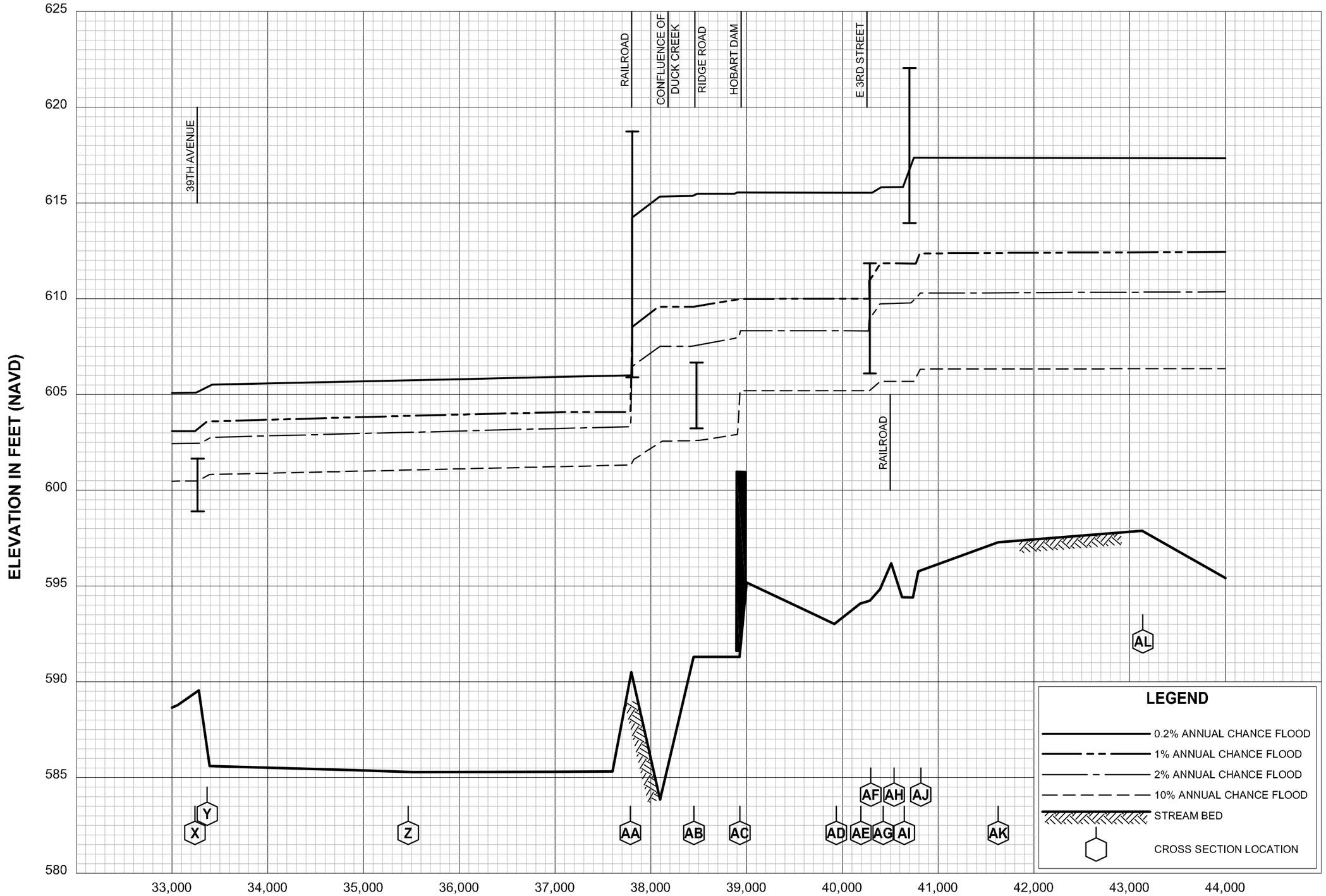
DEEP RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

31P



FLOOD PROFILES

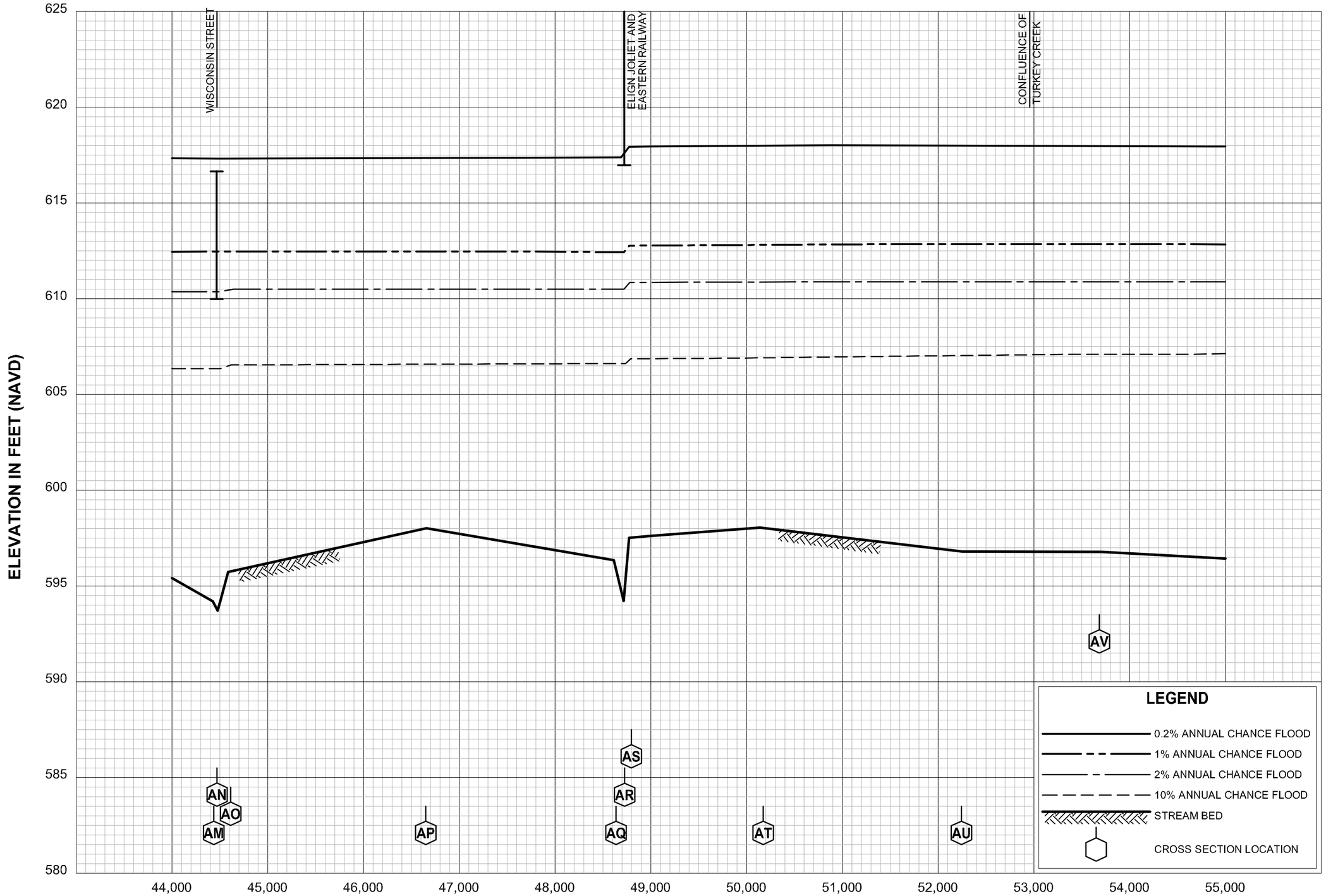
DEEP RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

32P



FLOOD PROFILES

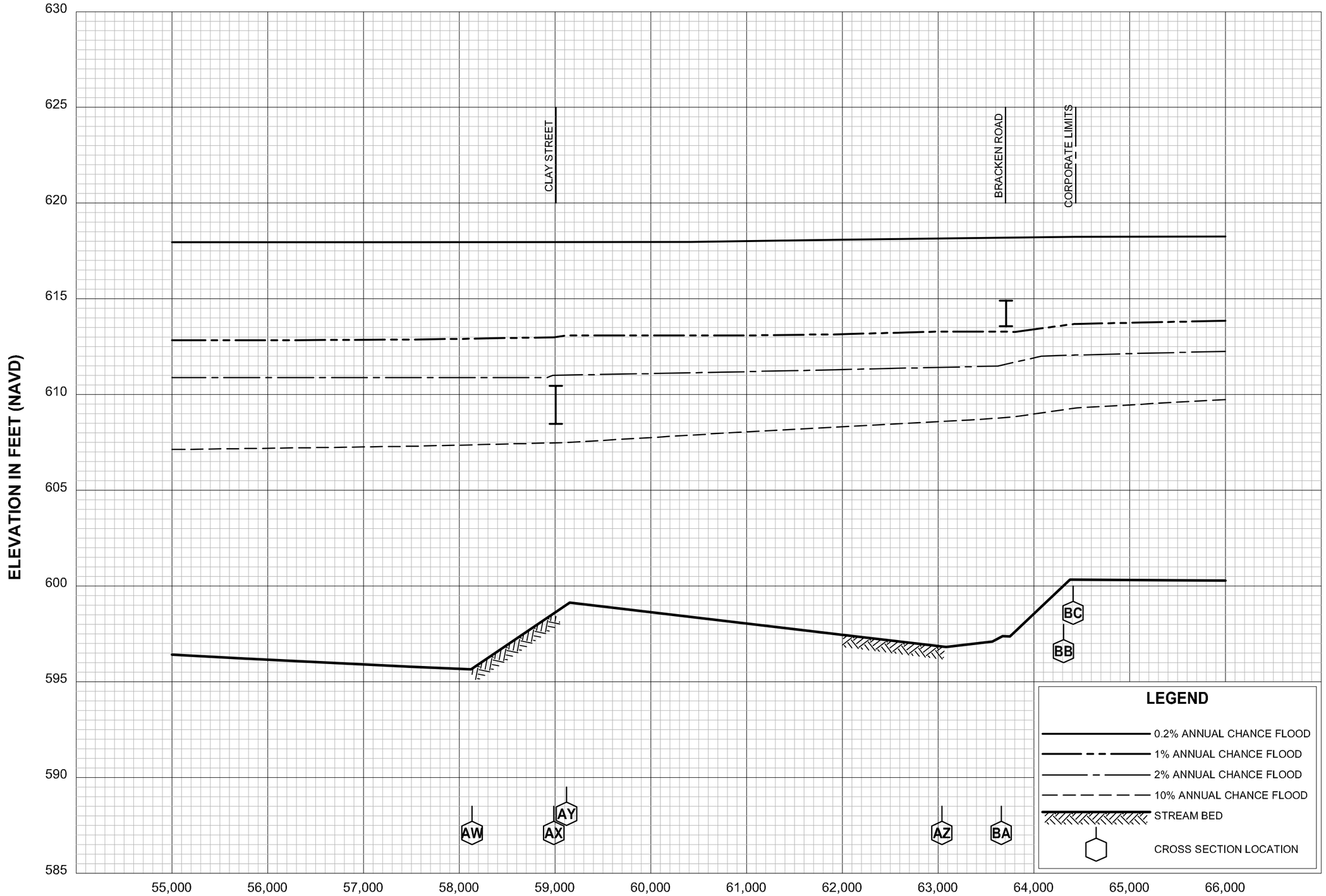
DEEP RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

33P



FLOOD PROFILES

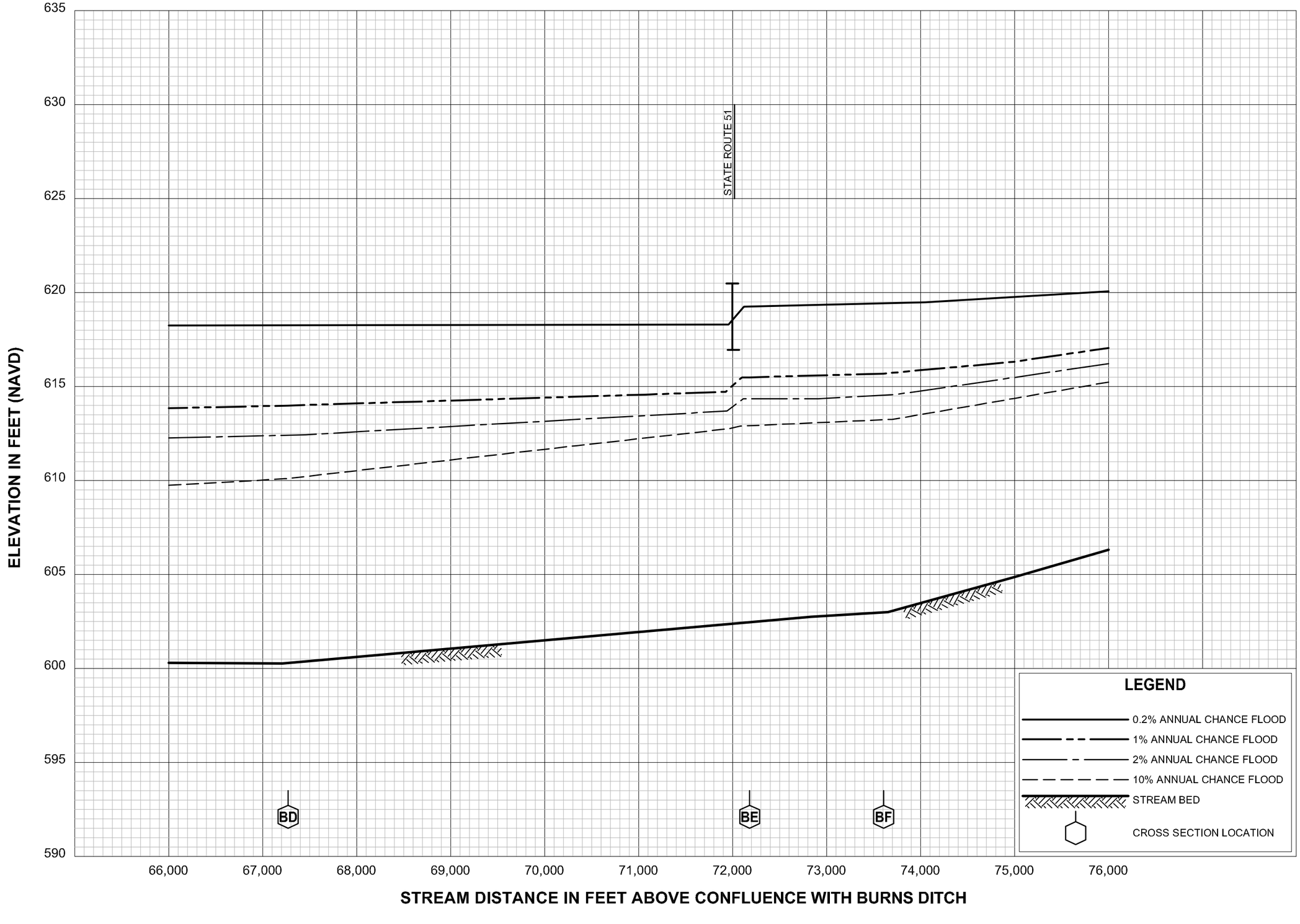
DEEP RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

34P



FLOOD PROFILES

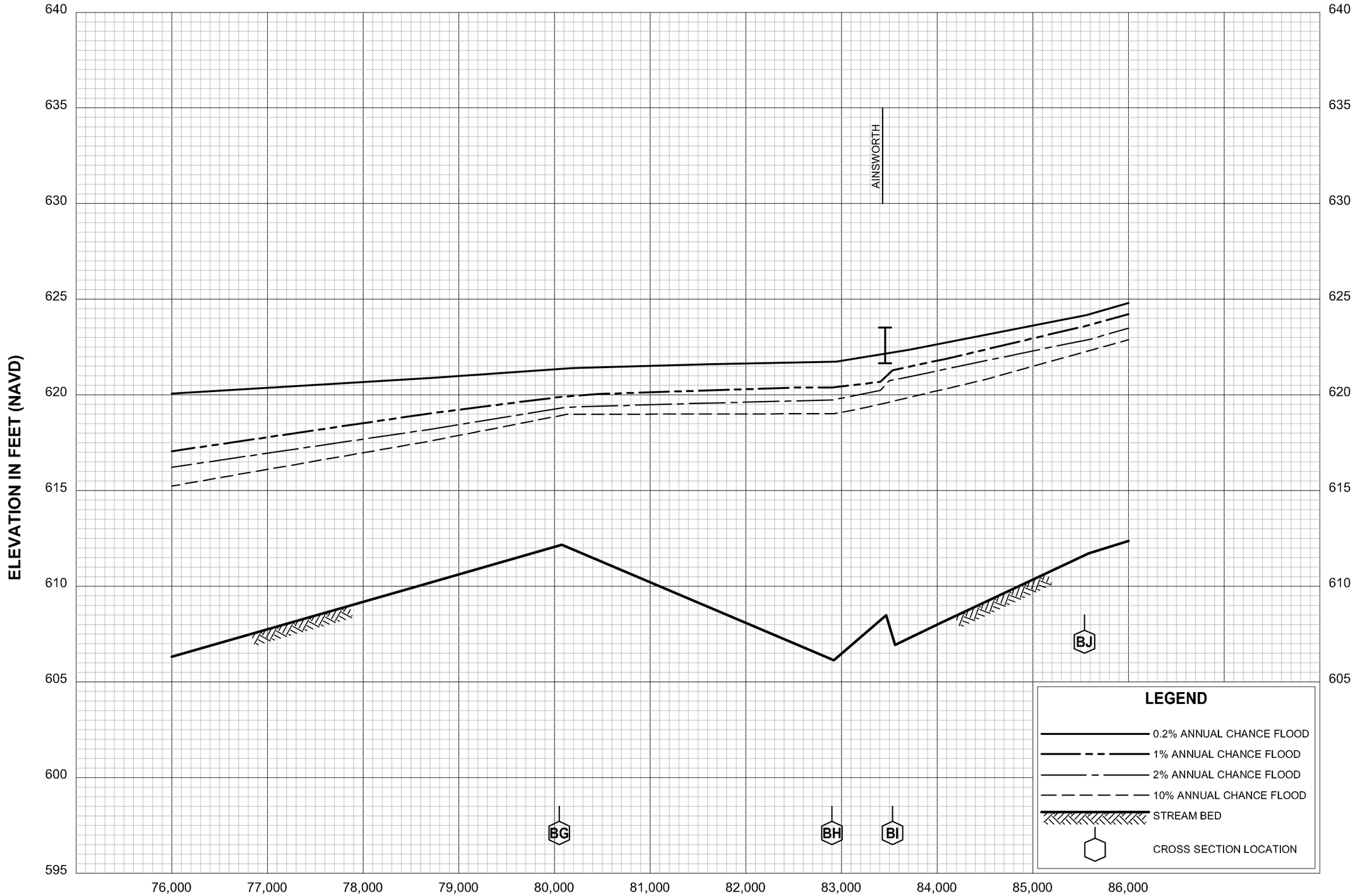
DEEP RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

35P



FLOOD PROFILES

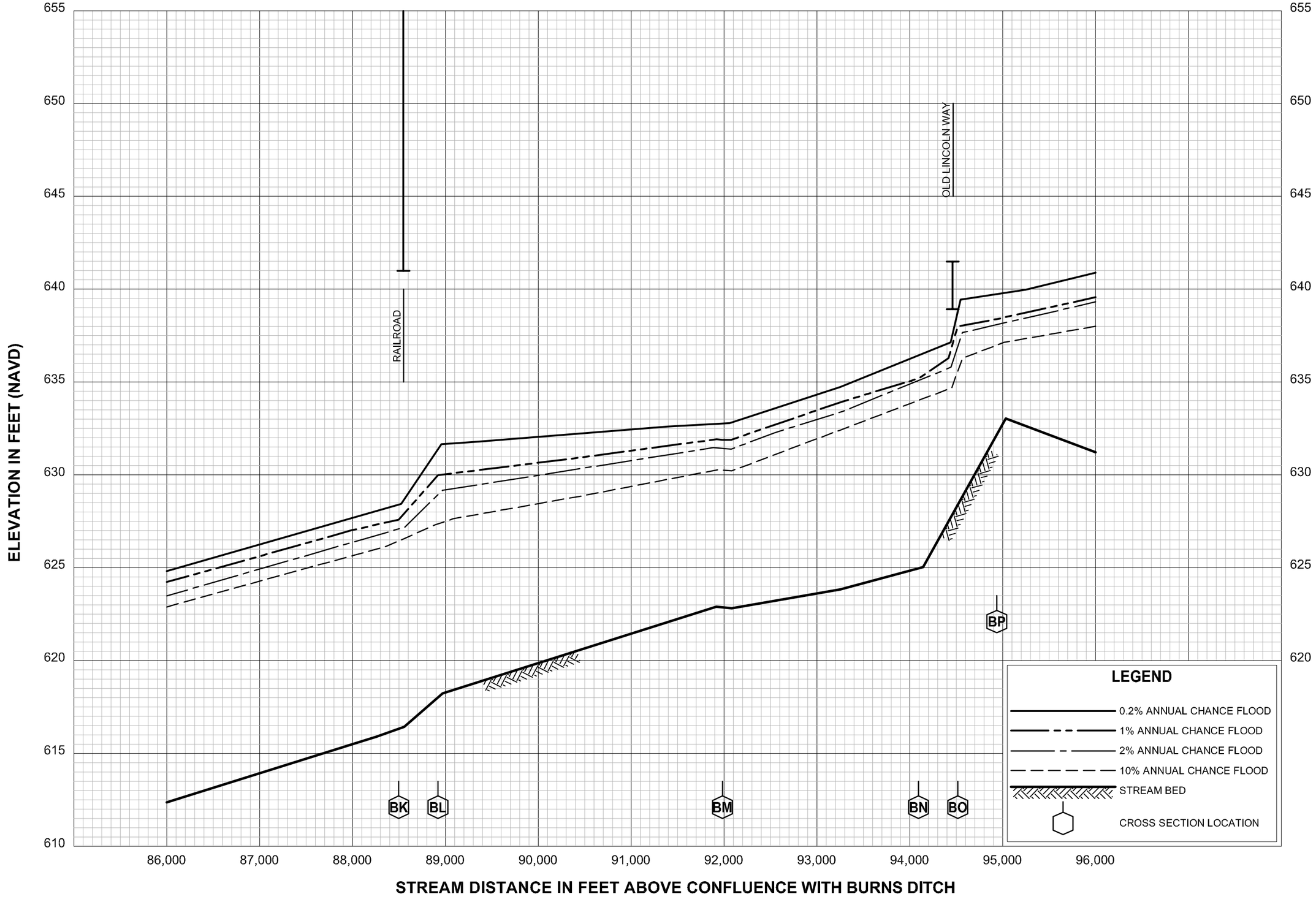
DEEP RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

36P



FLOOD PROFILES

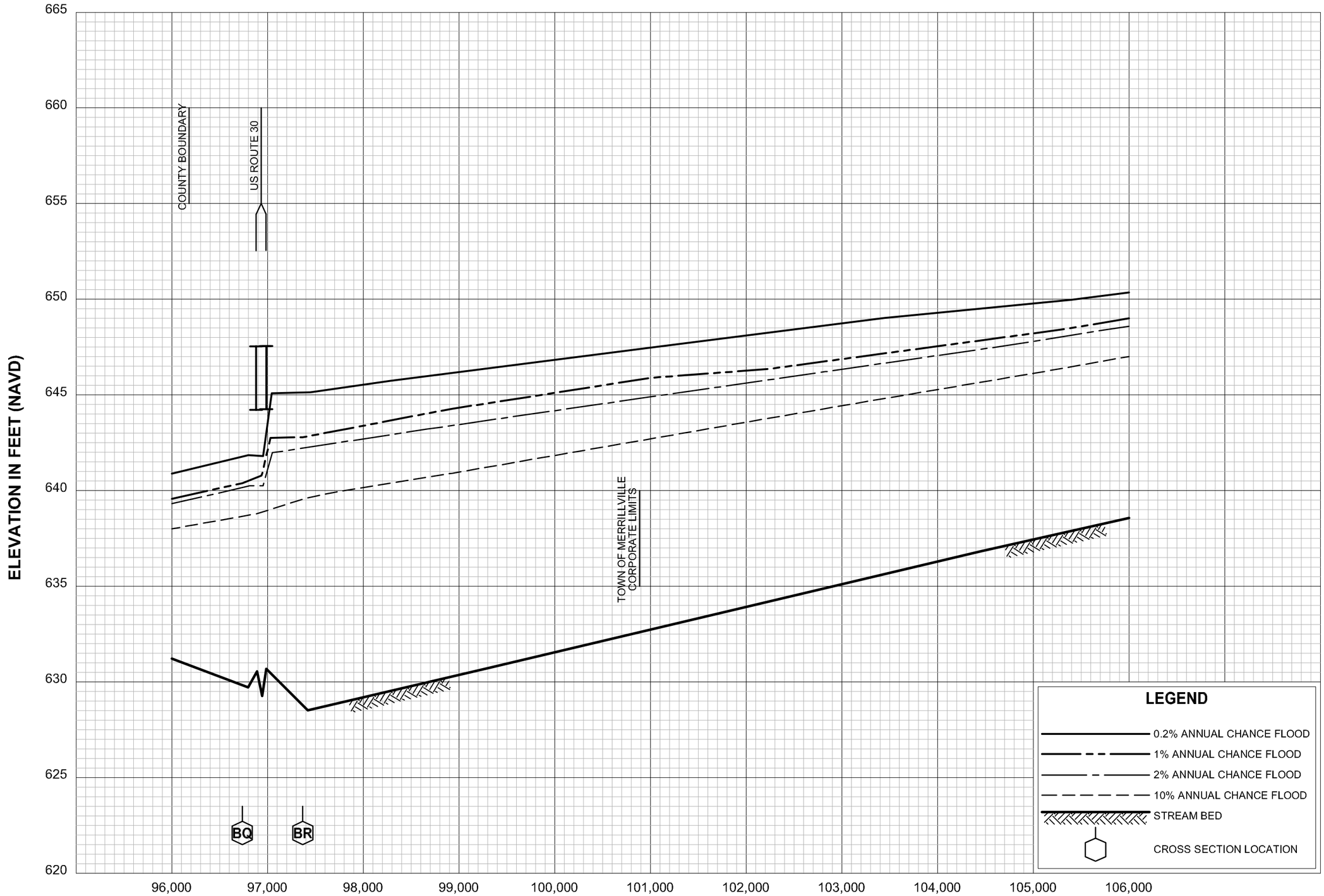
DEEP RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

37P



FLOOD PROFILES

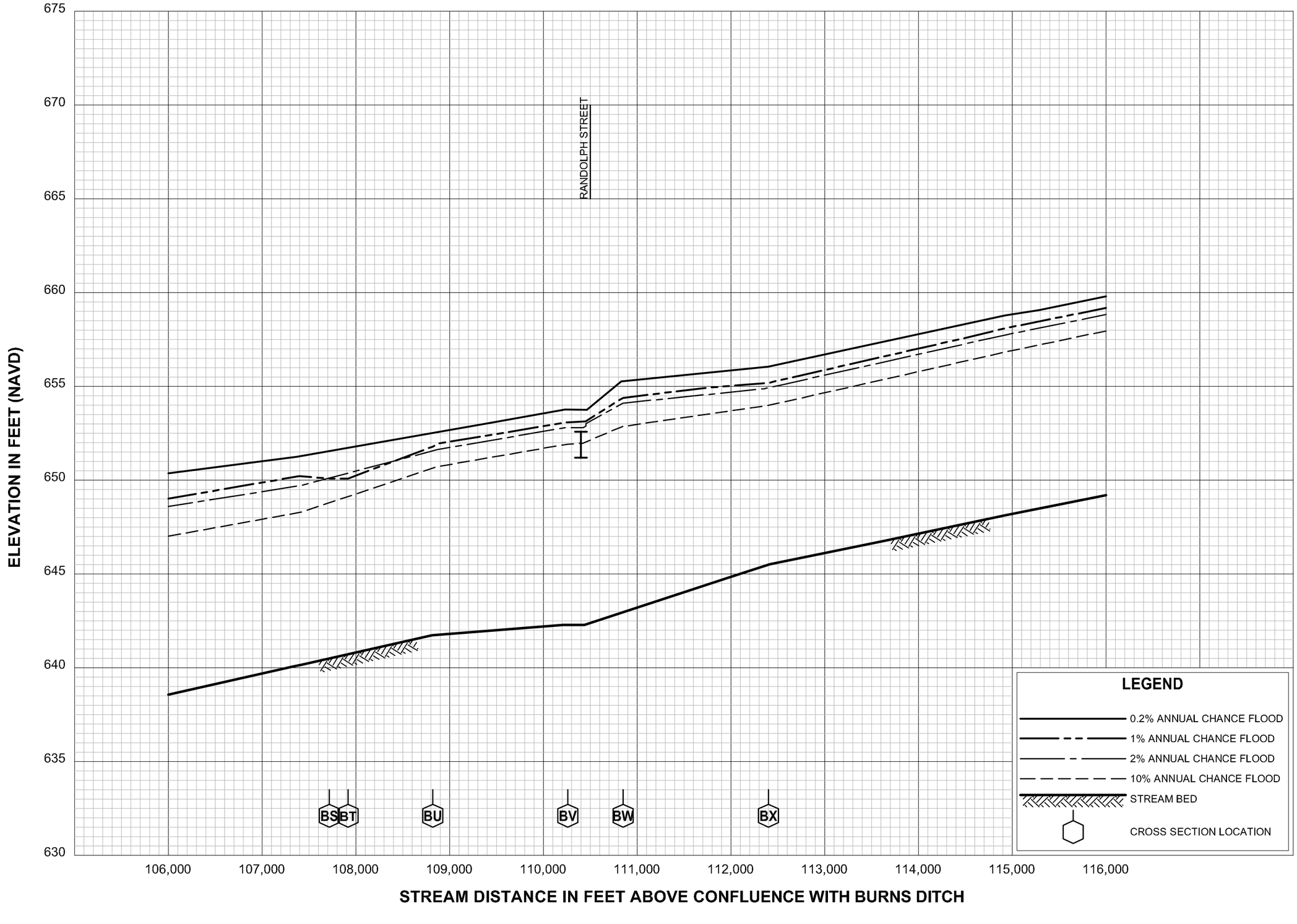
DEEP RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

38P



ELEVATION IN FEET (NAVD)

STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH BURNS DITCH

FLOOD PROFILES

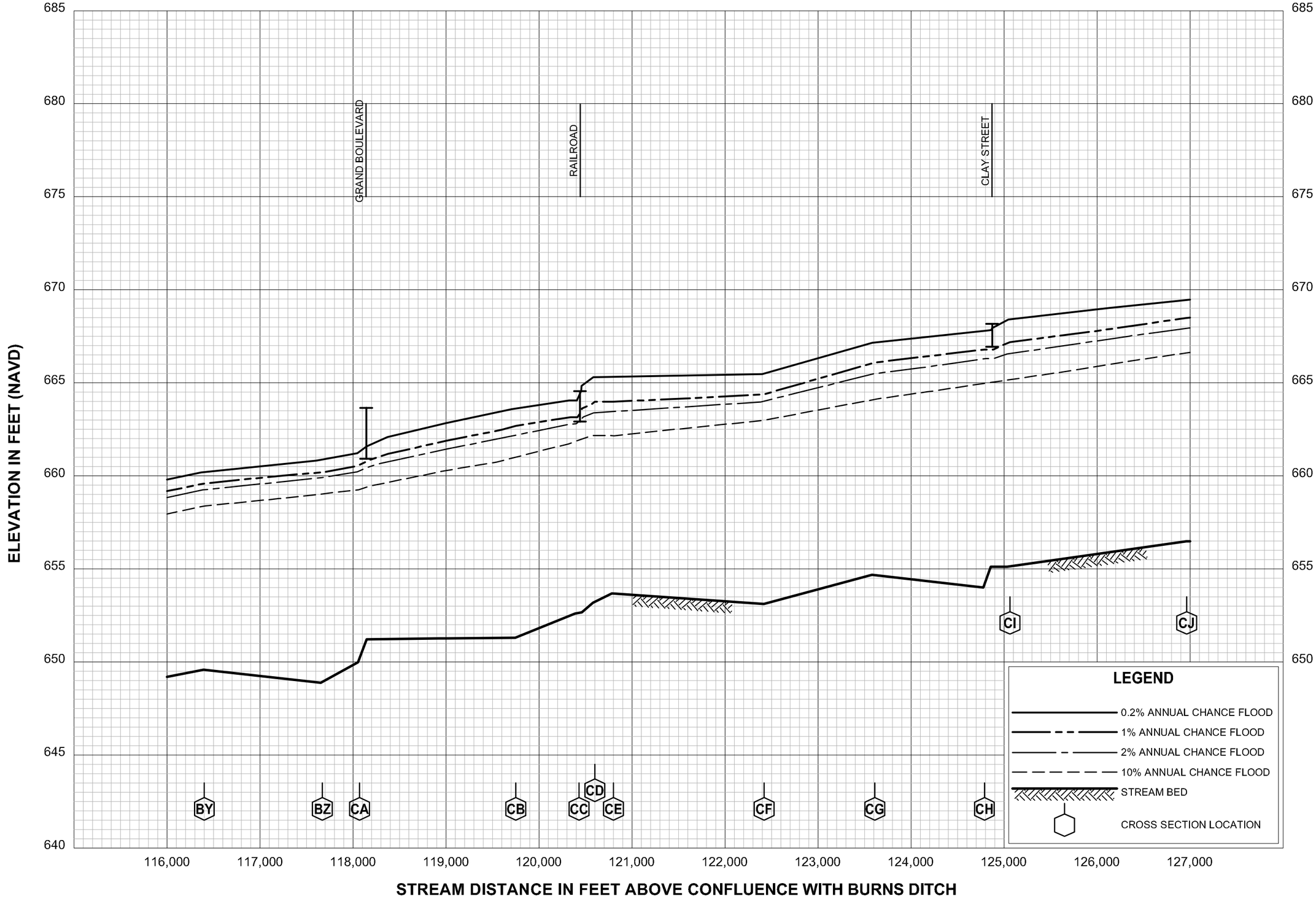
DEEP RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

39P



FLOOD PROFILES

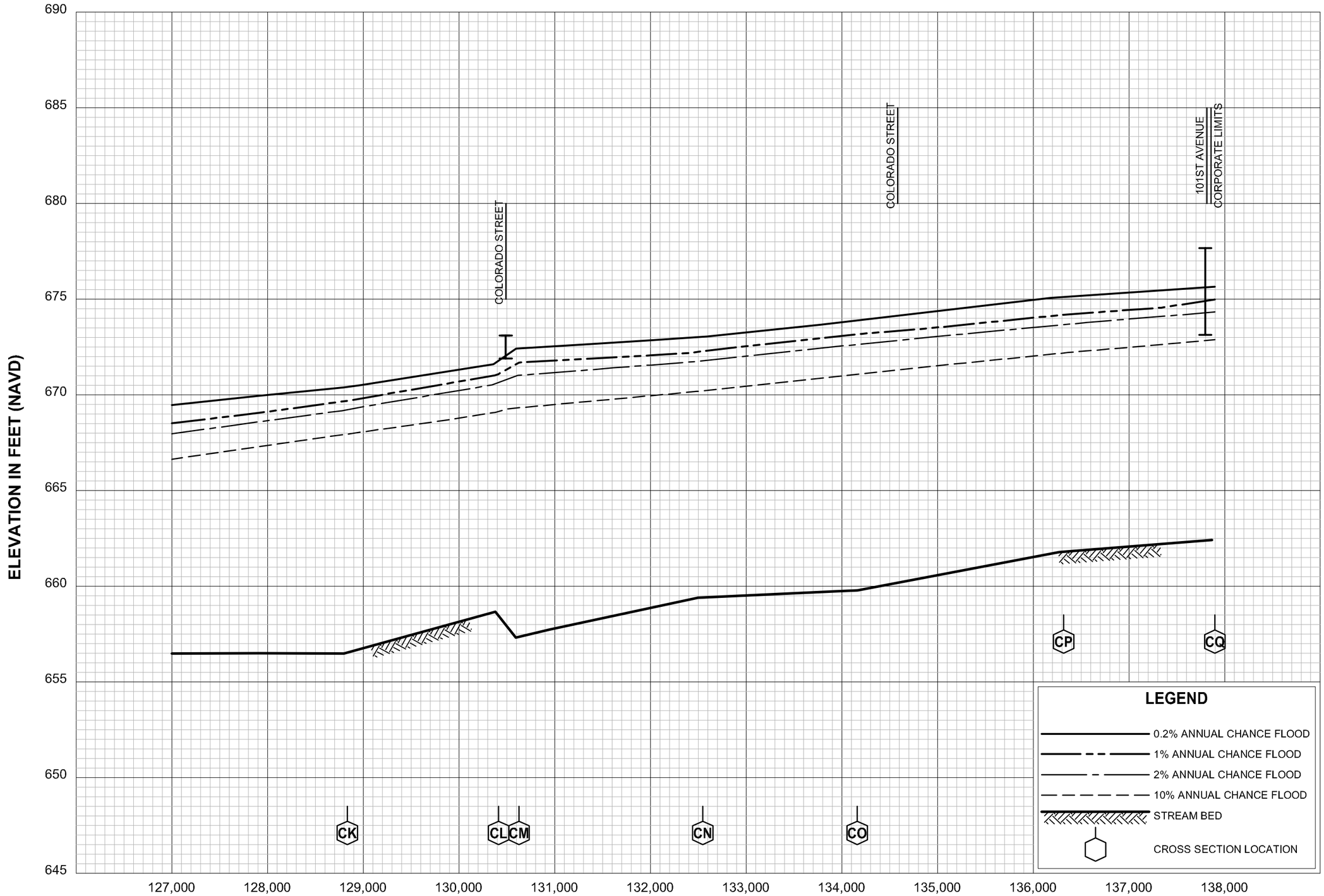
DEEP RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

40P



FLOOD PROFILES

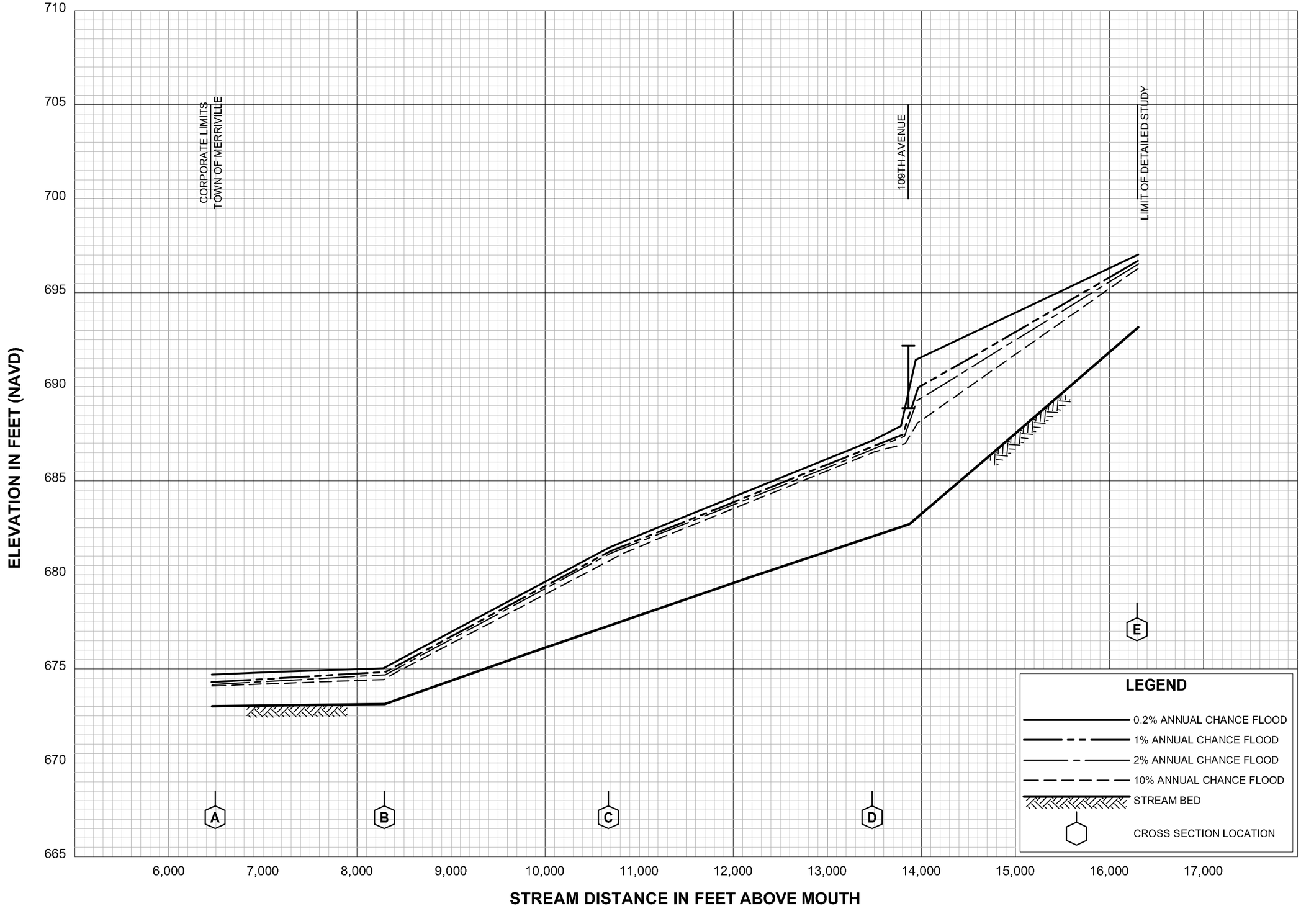
DEEP RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

41P



FLOOD PROFILES

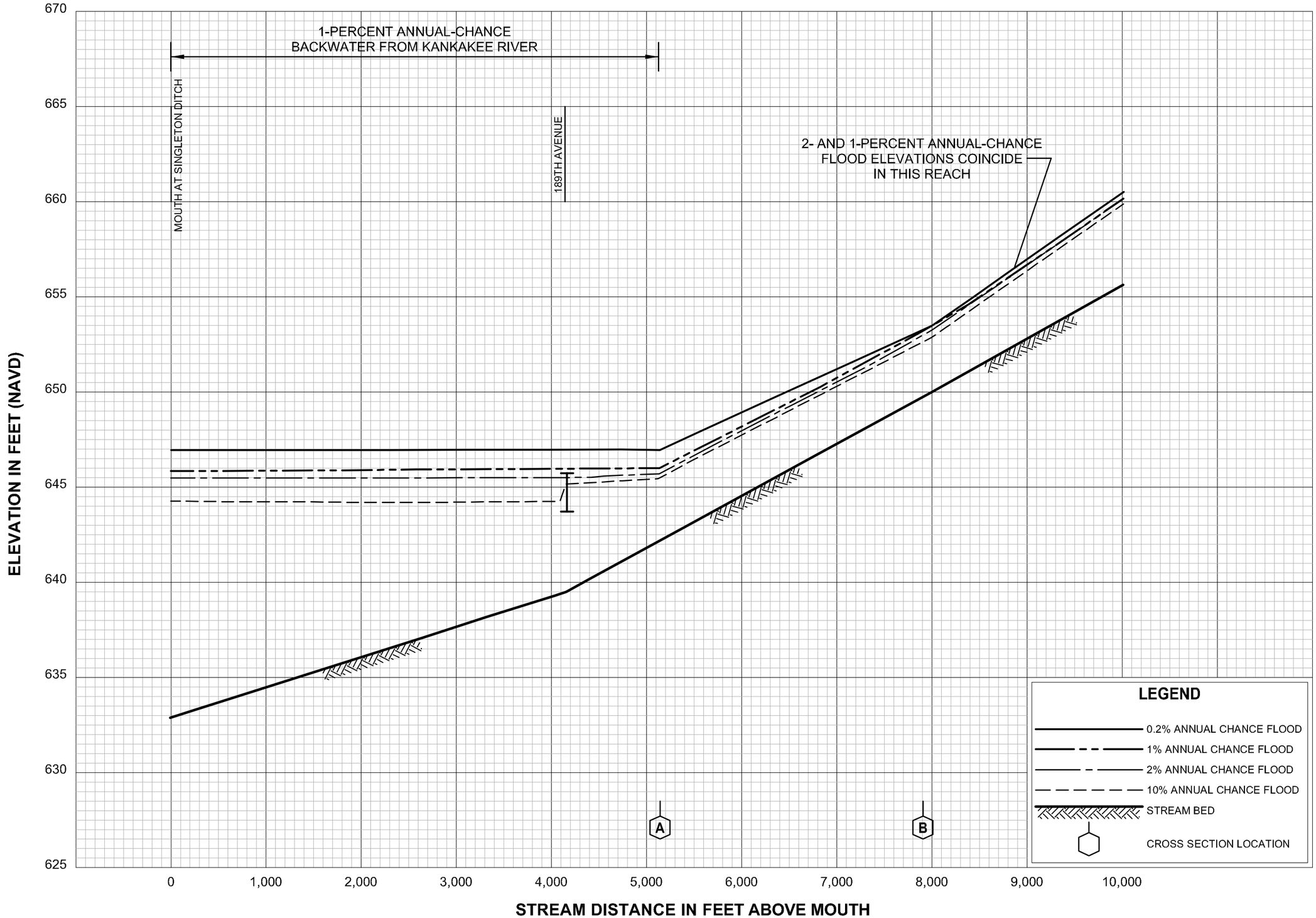
DEER CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

42P



FLOOD PROFILES

DINWIDDIE DITCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

43P

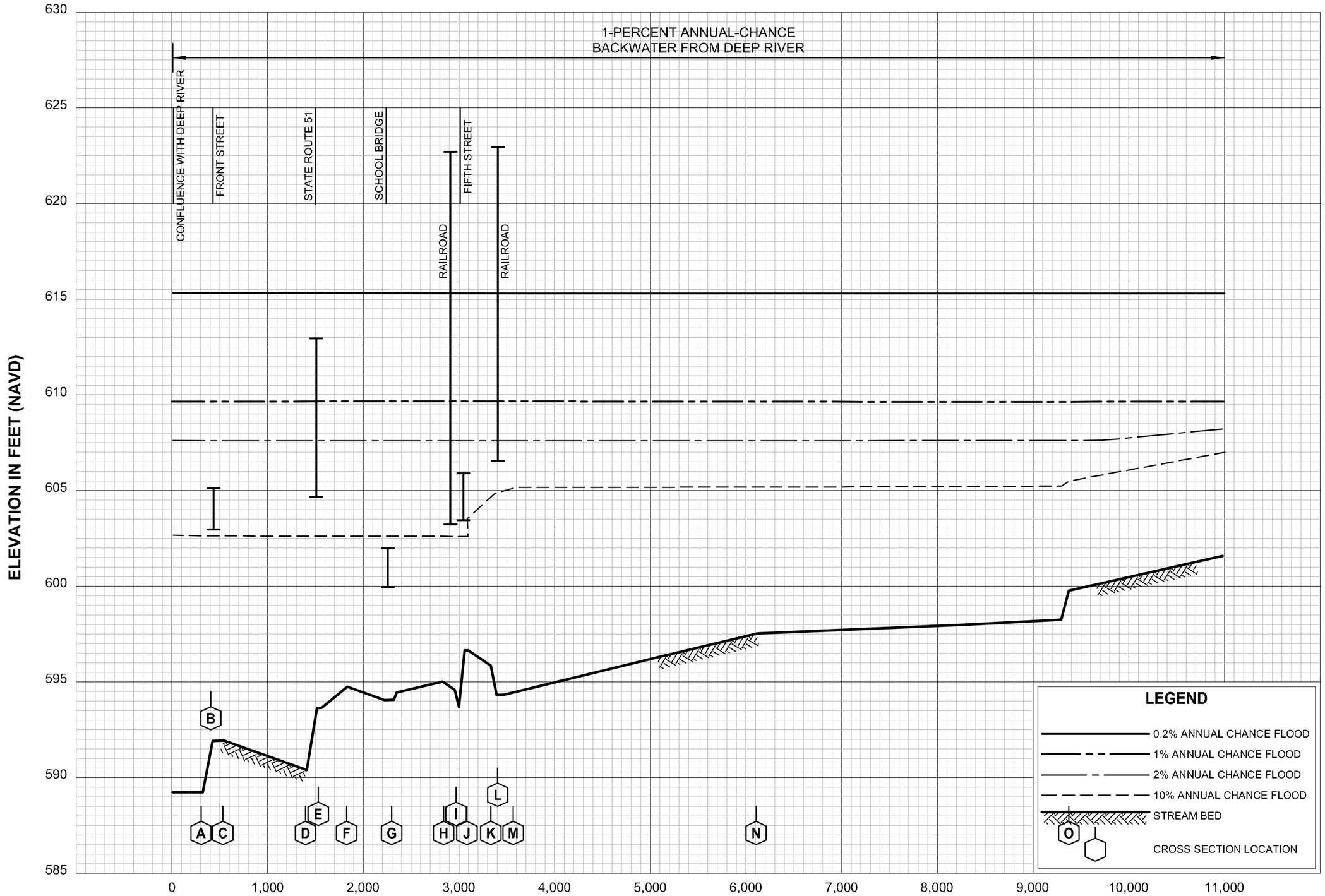
FLOOD PROFILES

DINWIDDIE DITCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS



FLOOD PROFILES

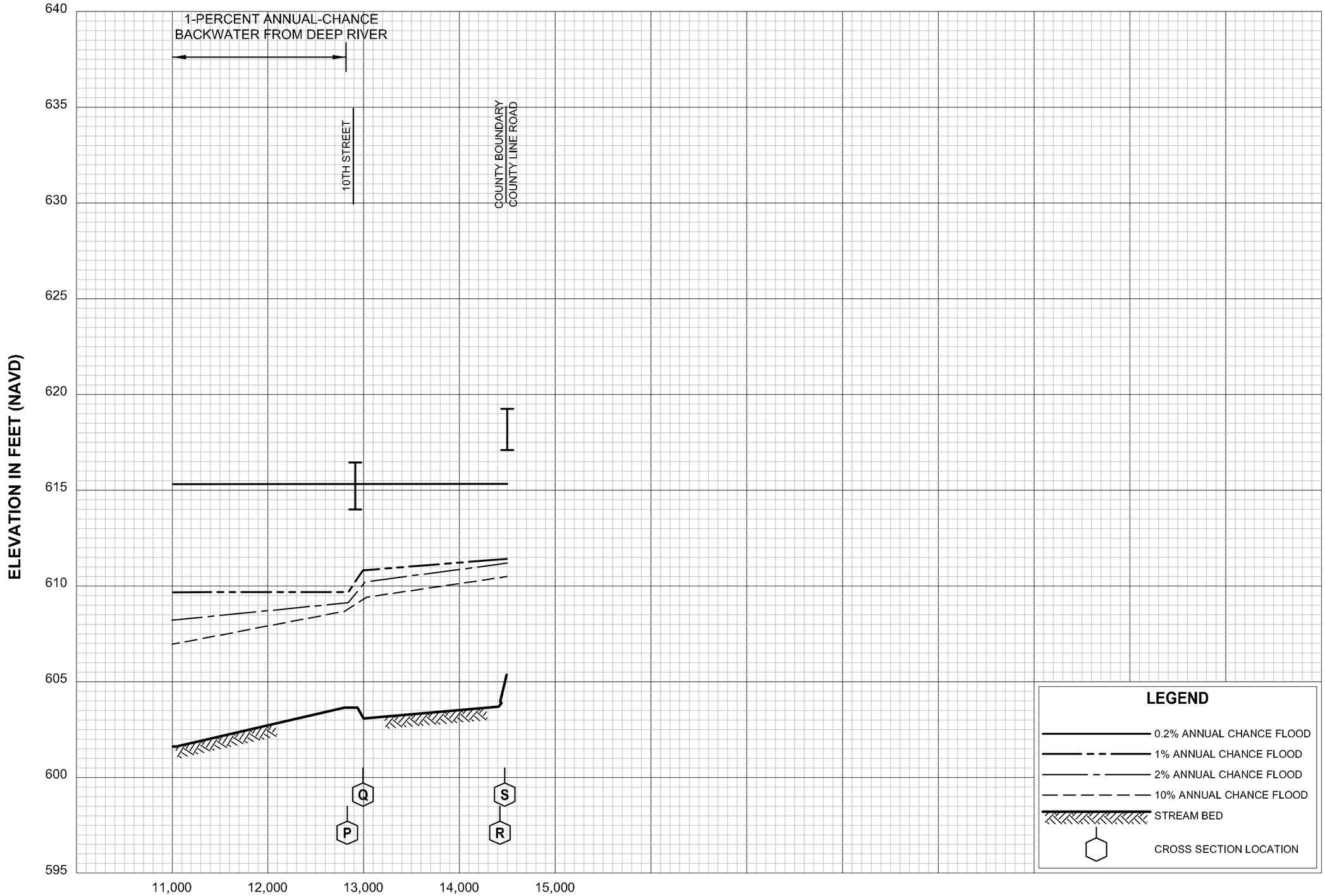
DUCK CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

45P



FLOOD PROFILES

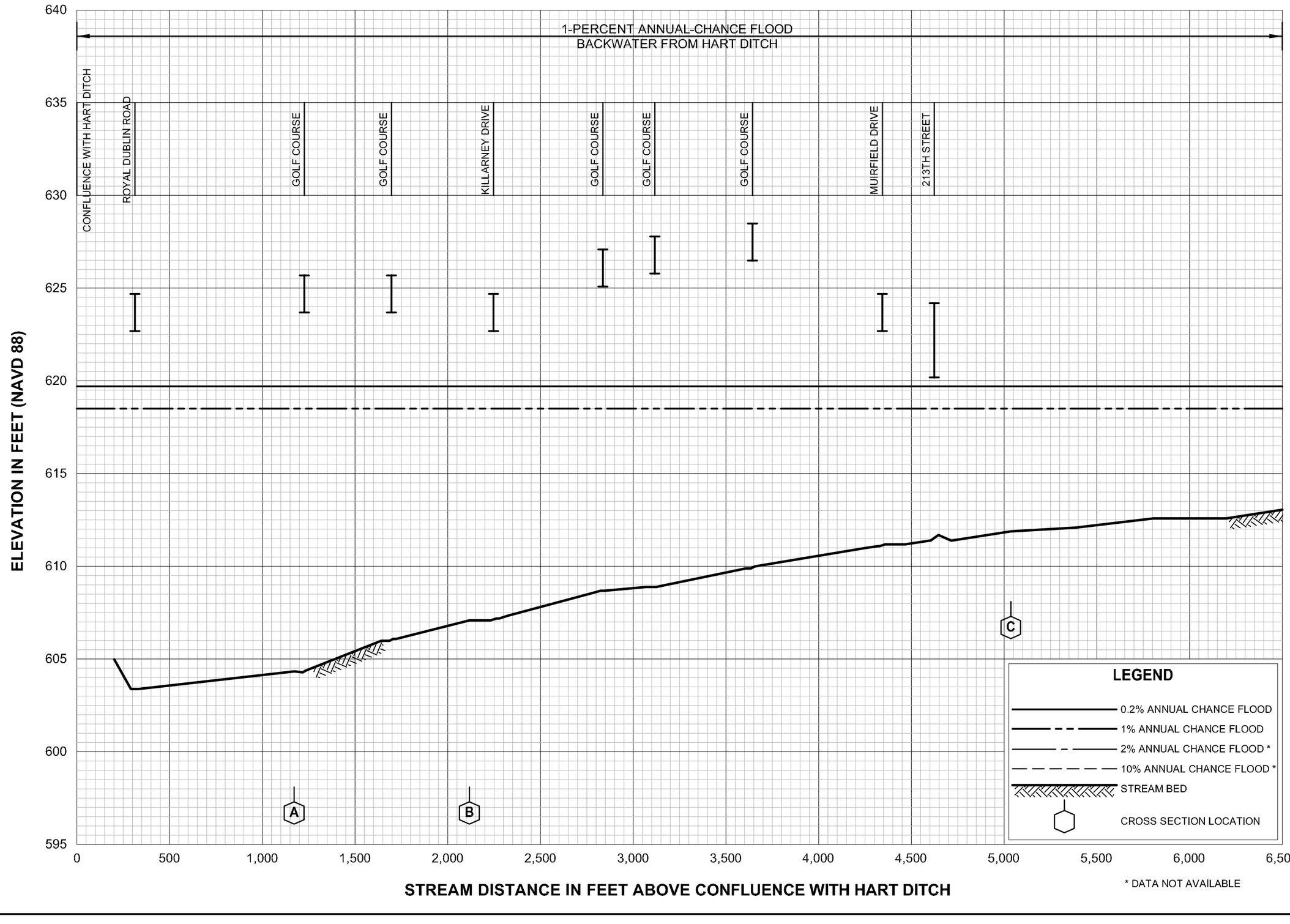
DUCK CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

46P



FLOOD PROFILES

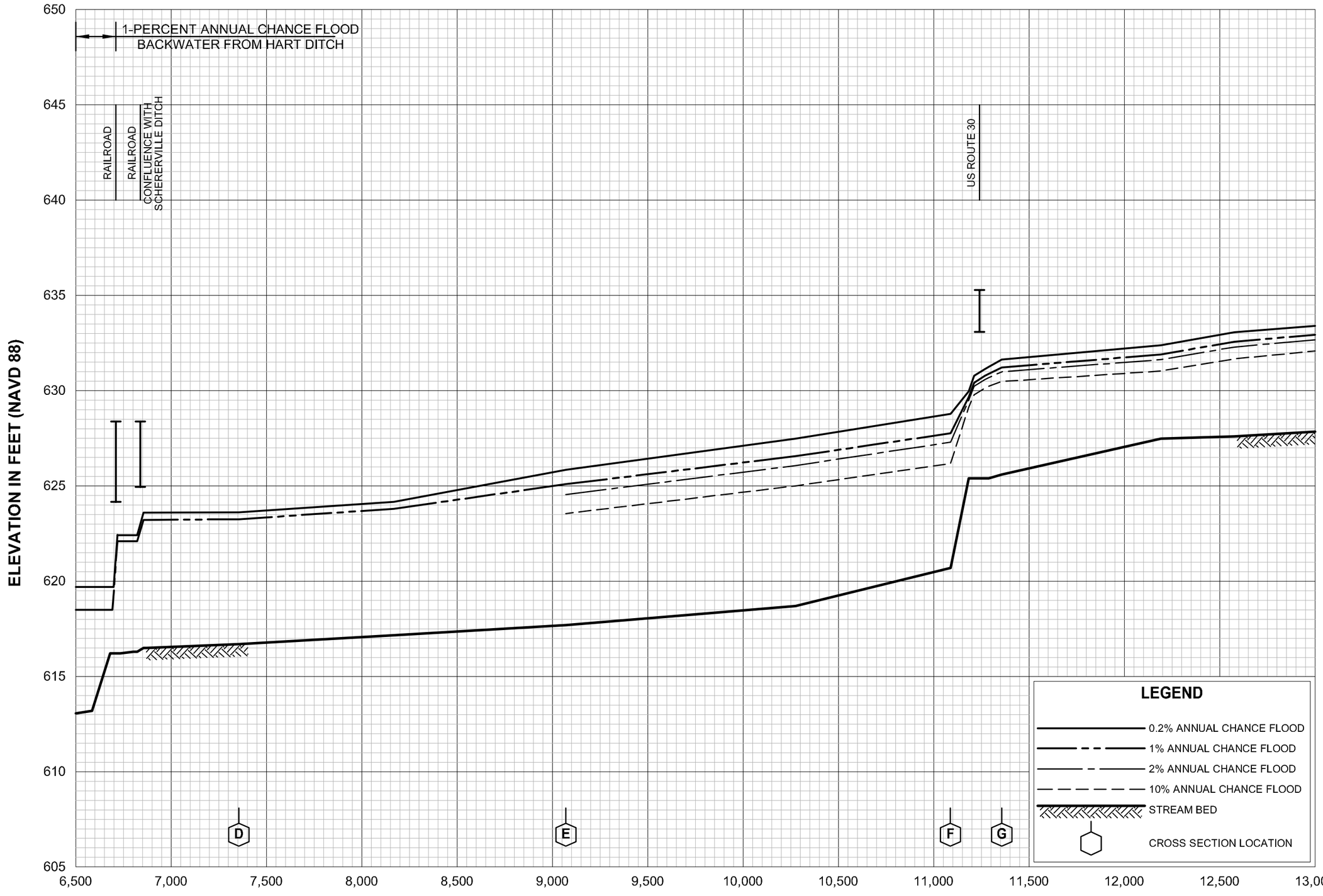
DYER DITCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

47P



FLOOD PROFILES

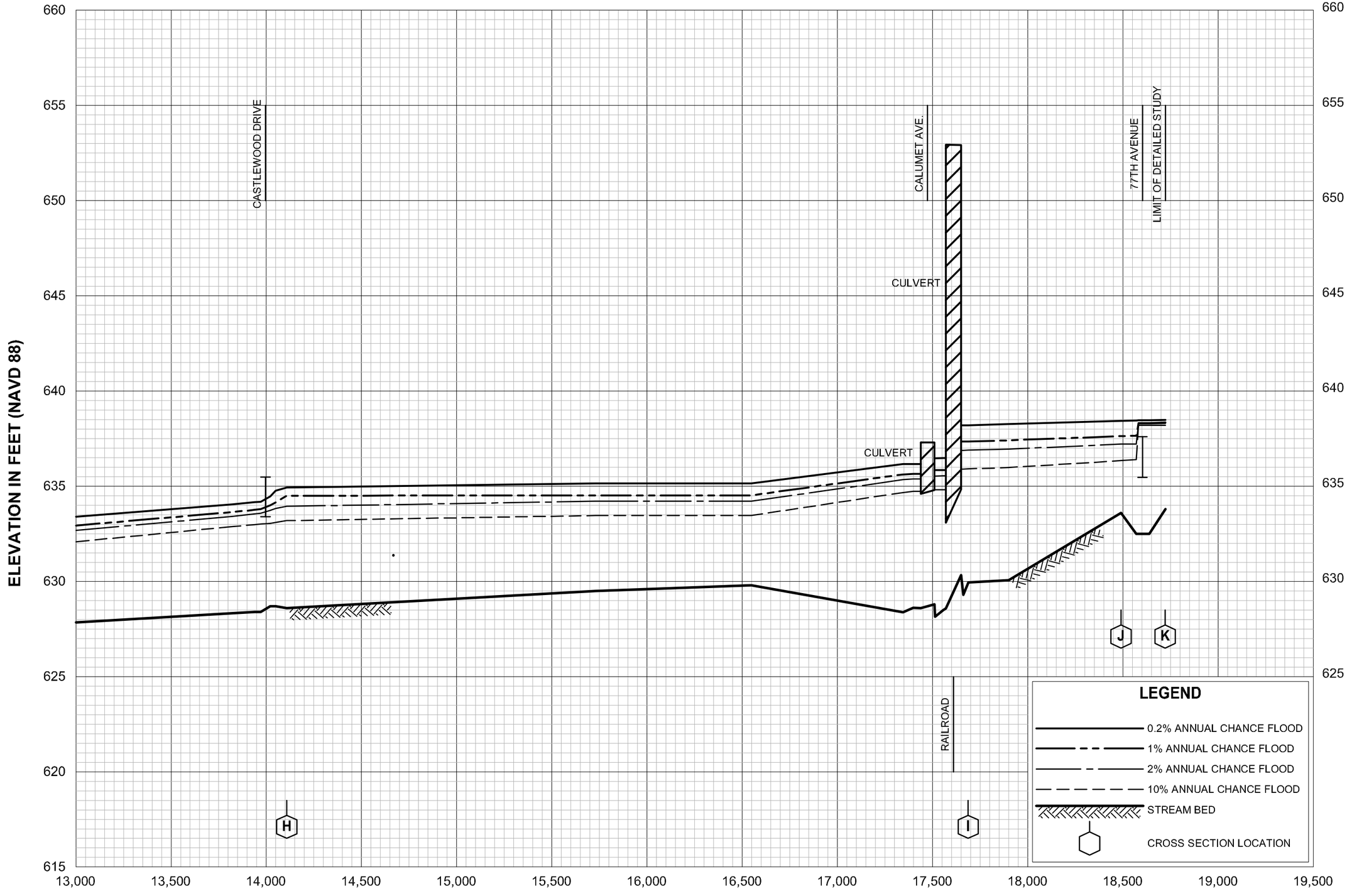
DYER DITCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

48P



FLOOD PROFILES

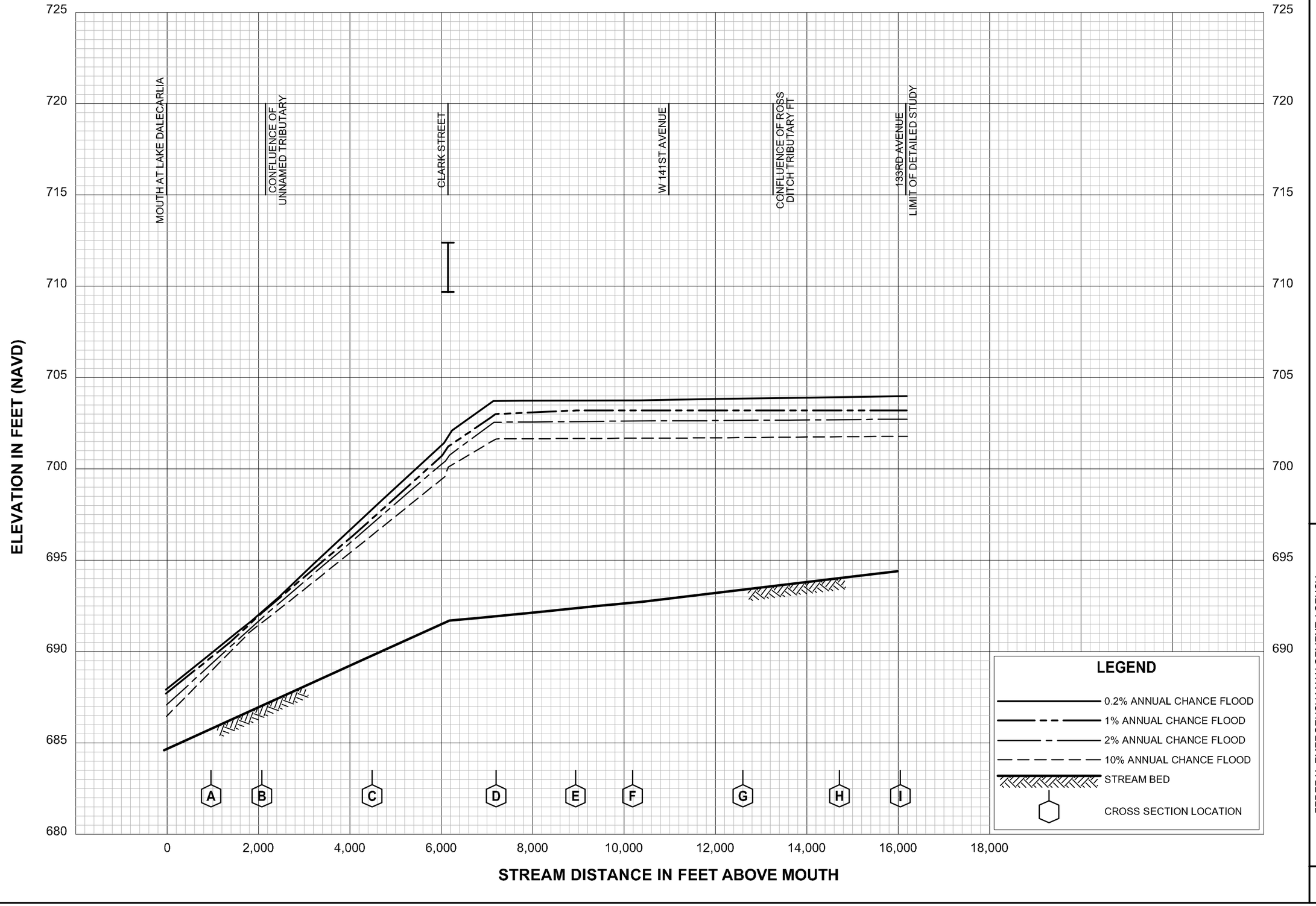
DYER DITCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

49P



FLOOD PROFILES

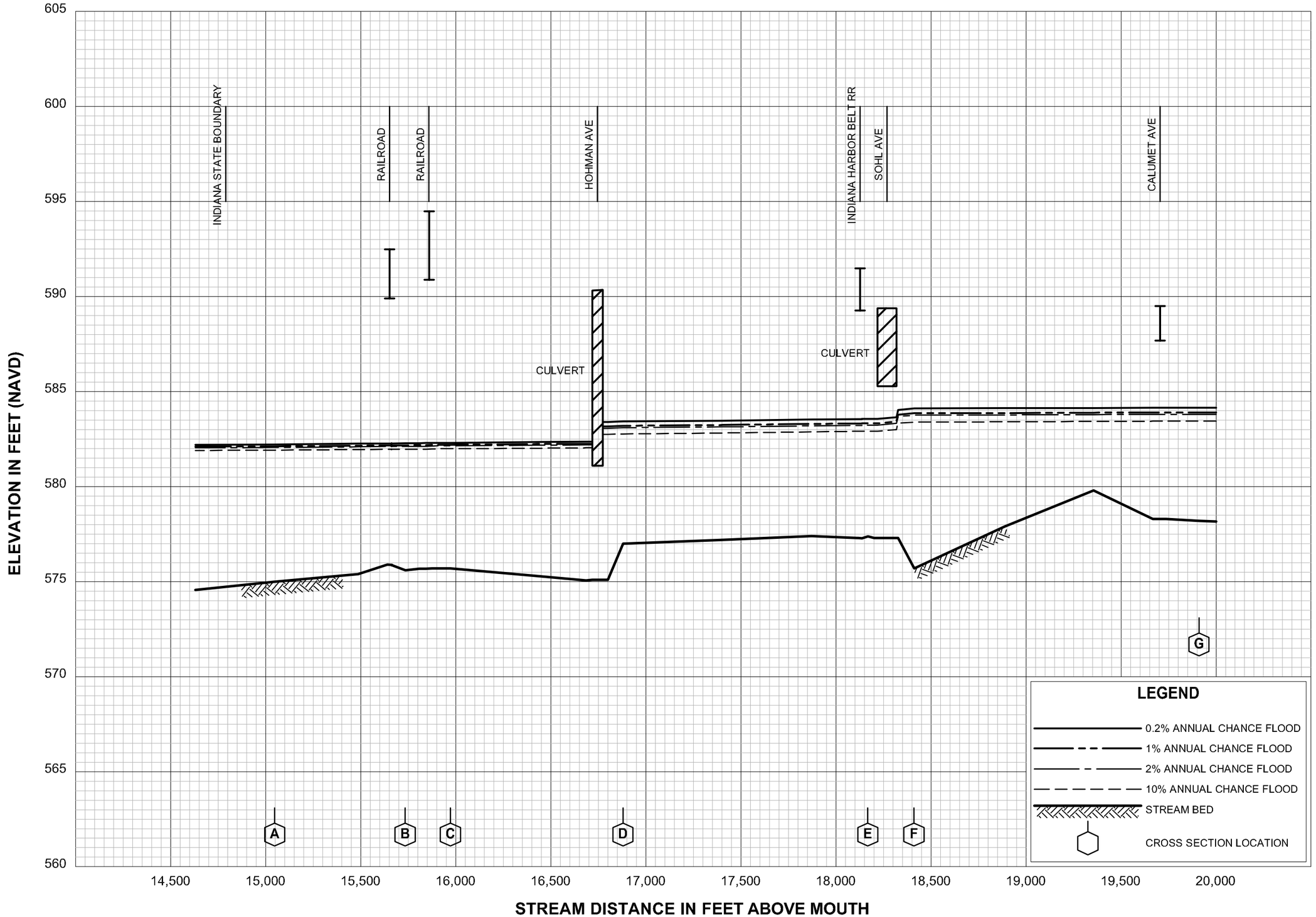
FOSS DITCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

50P



FLOOD PROFILES

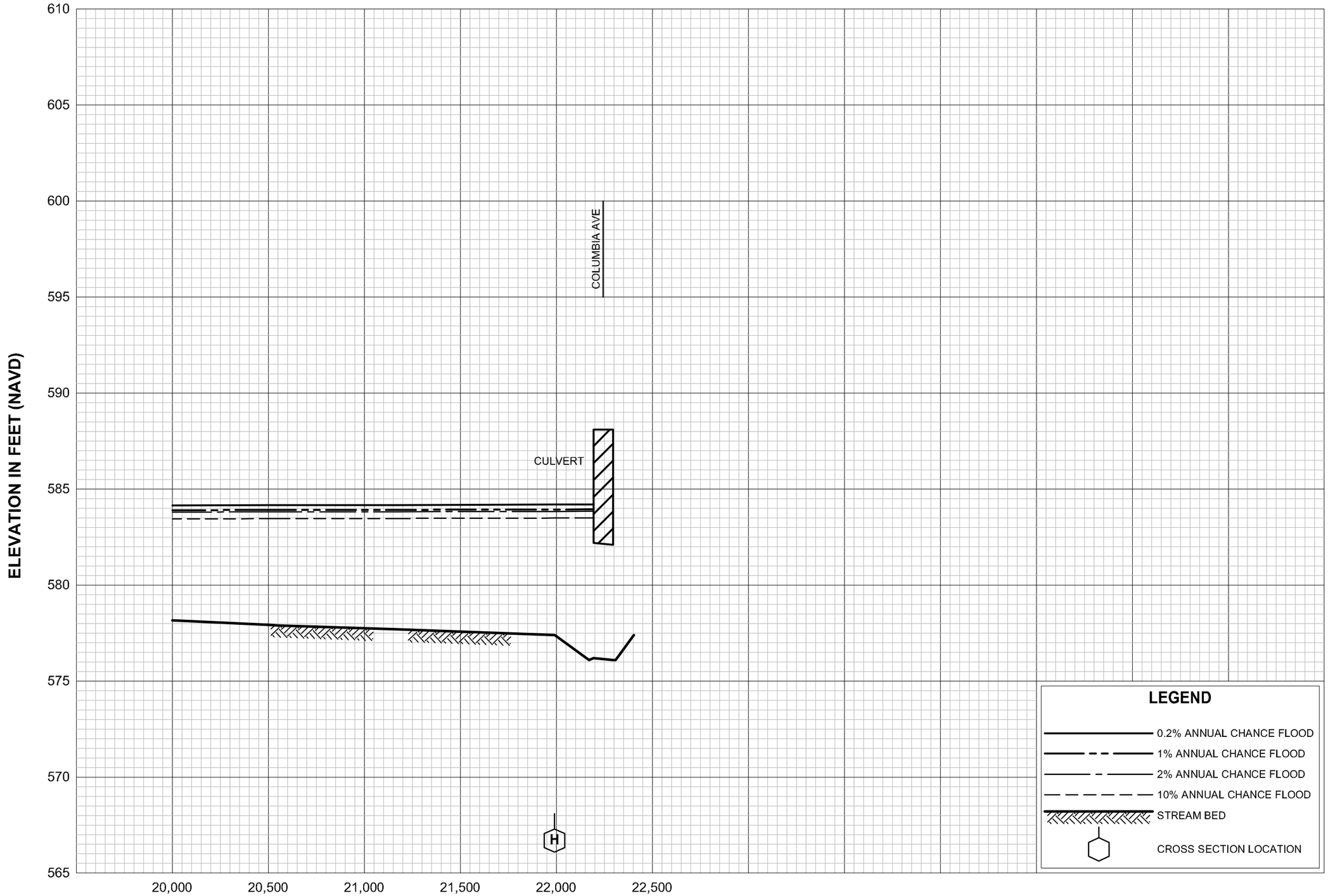
GRAND CALUMET RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

51P



FLOOD PROFILES

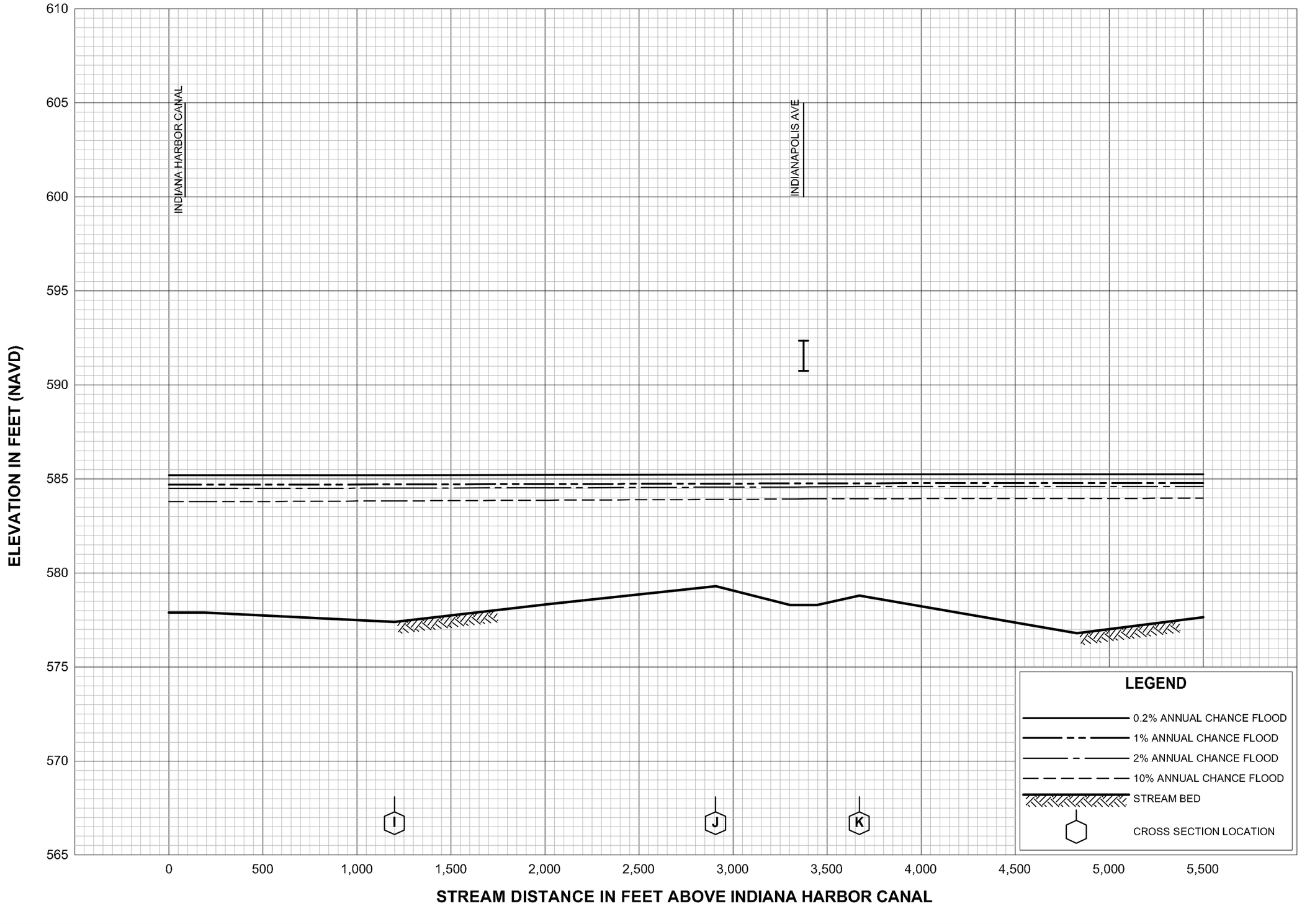
GRAND CALUMET RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

52P



FLOOD PROFILES

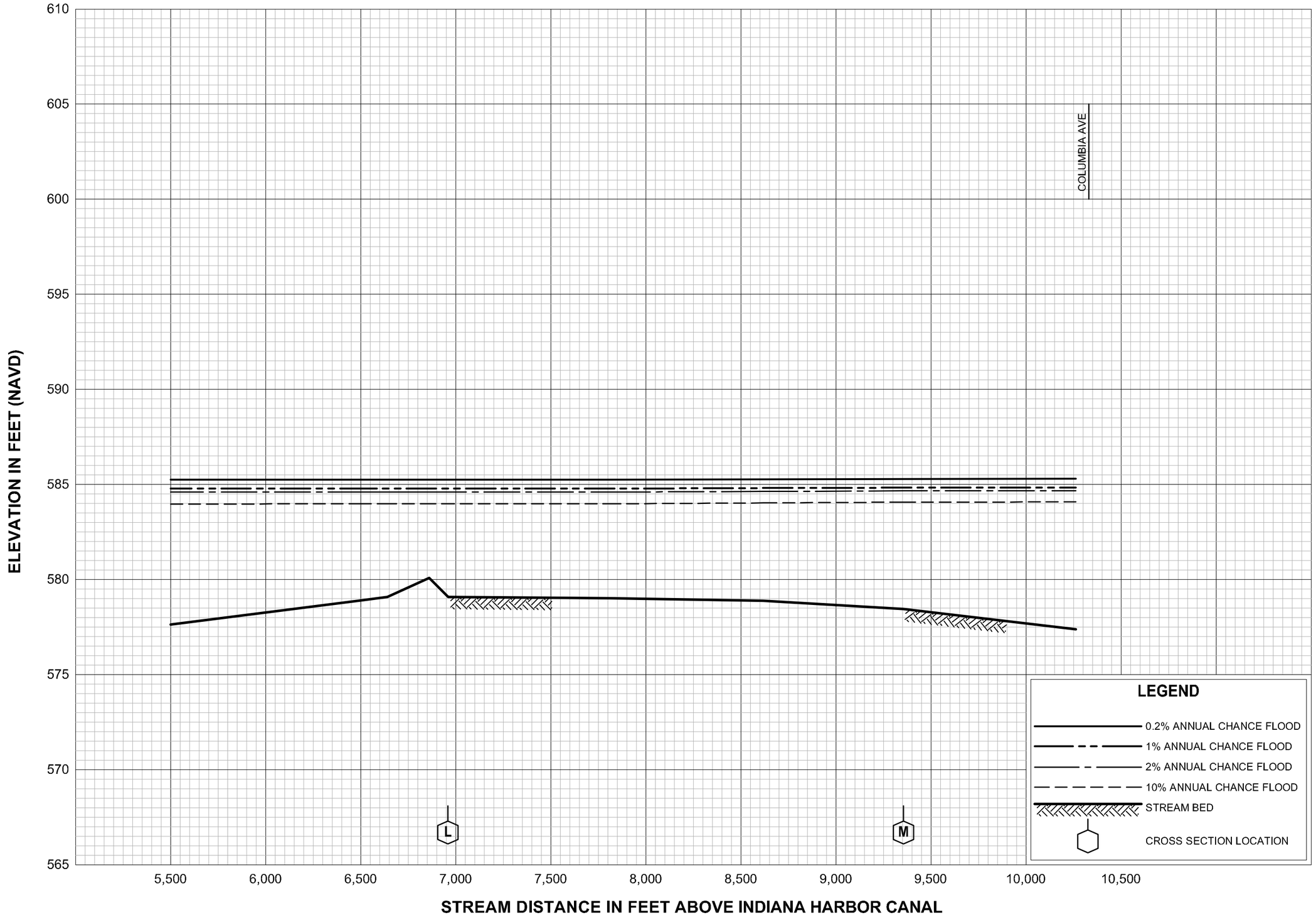
GRAND CALUMET RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

53P



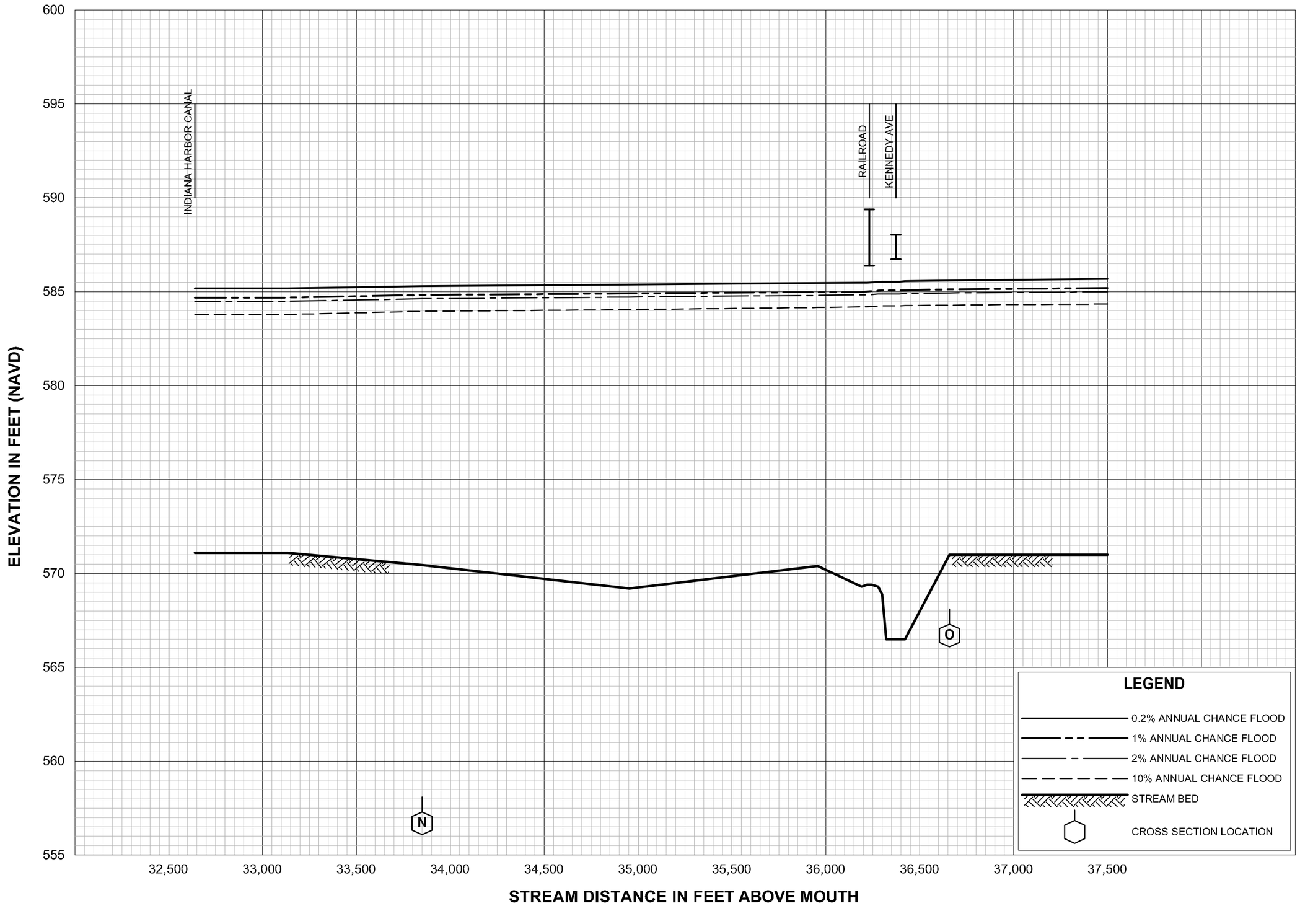
FLOOD PROFILES

GRAND CALUMET RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS



FLOOD PROFILES

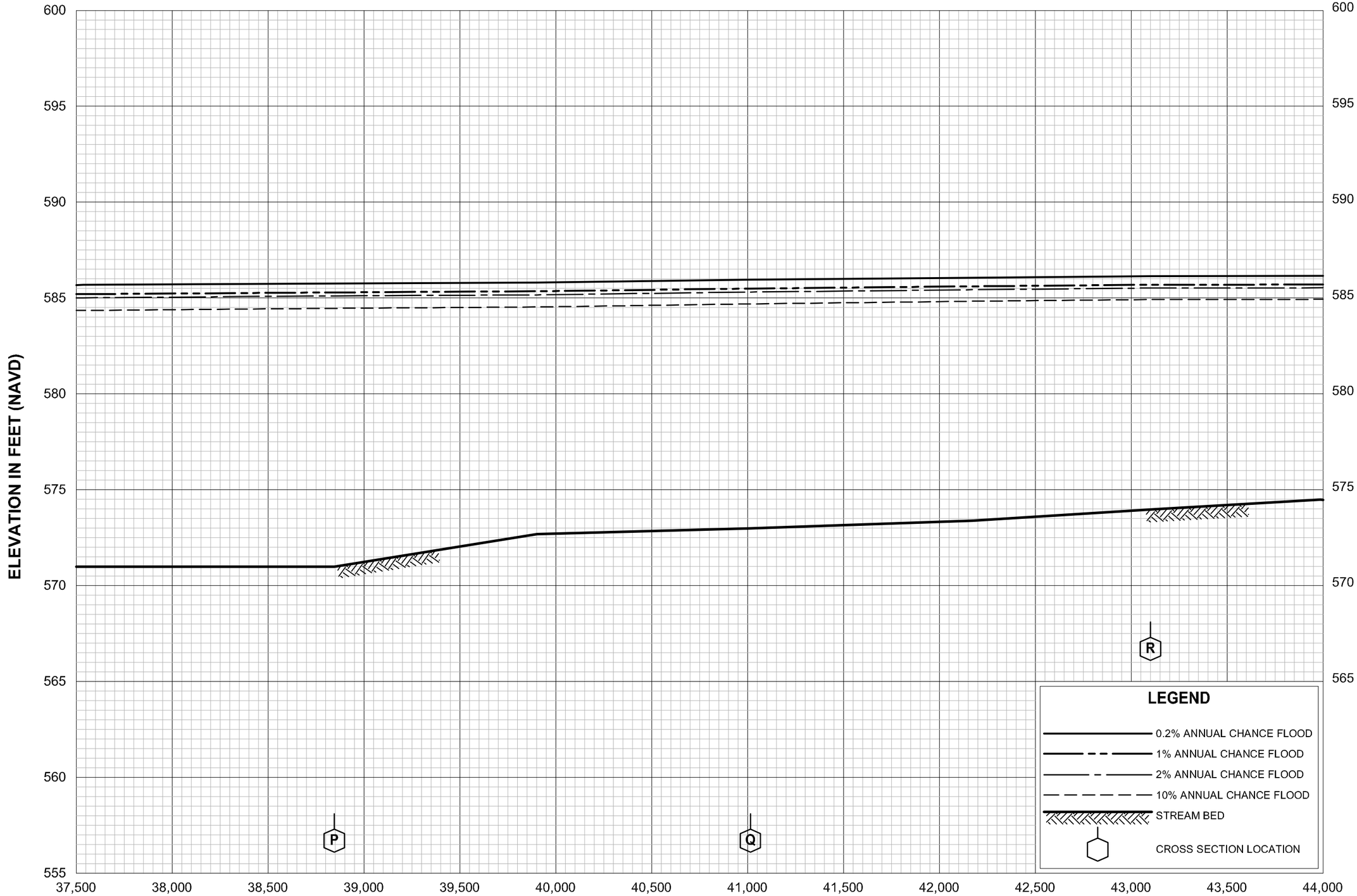
GRAND CALUMET RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

55P



FLOOD PROFILES

GRAND CALUMET RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

56P

FLOOD PROFILES

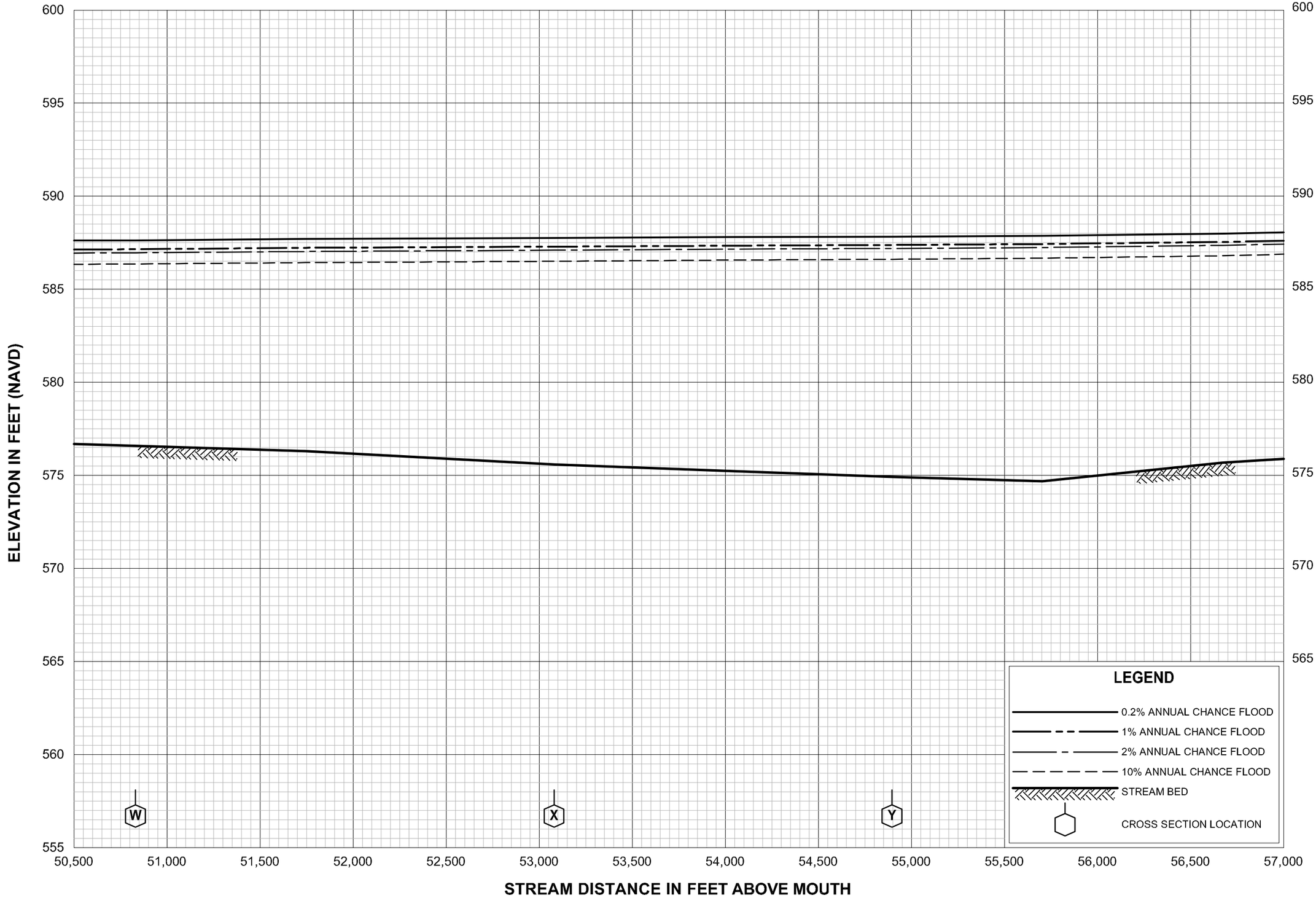
GRAND CALUMET RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

57P



FLOOD PROFILES

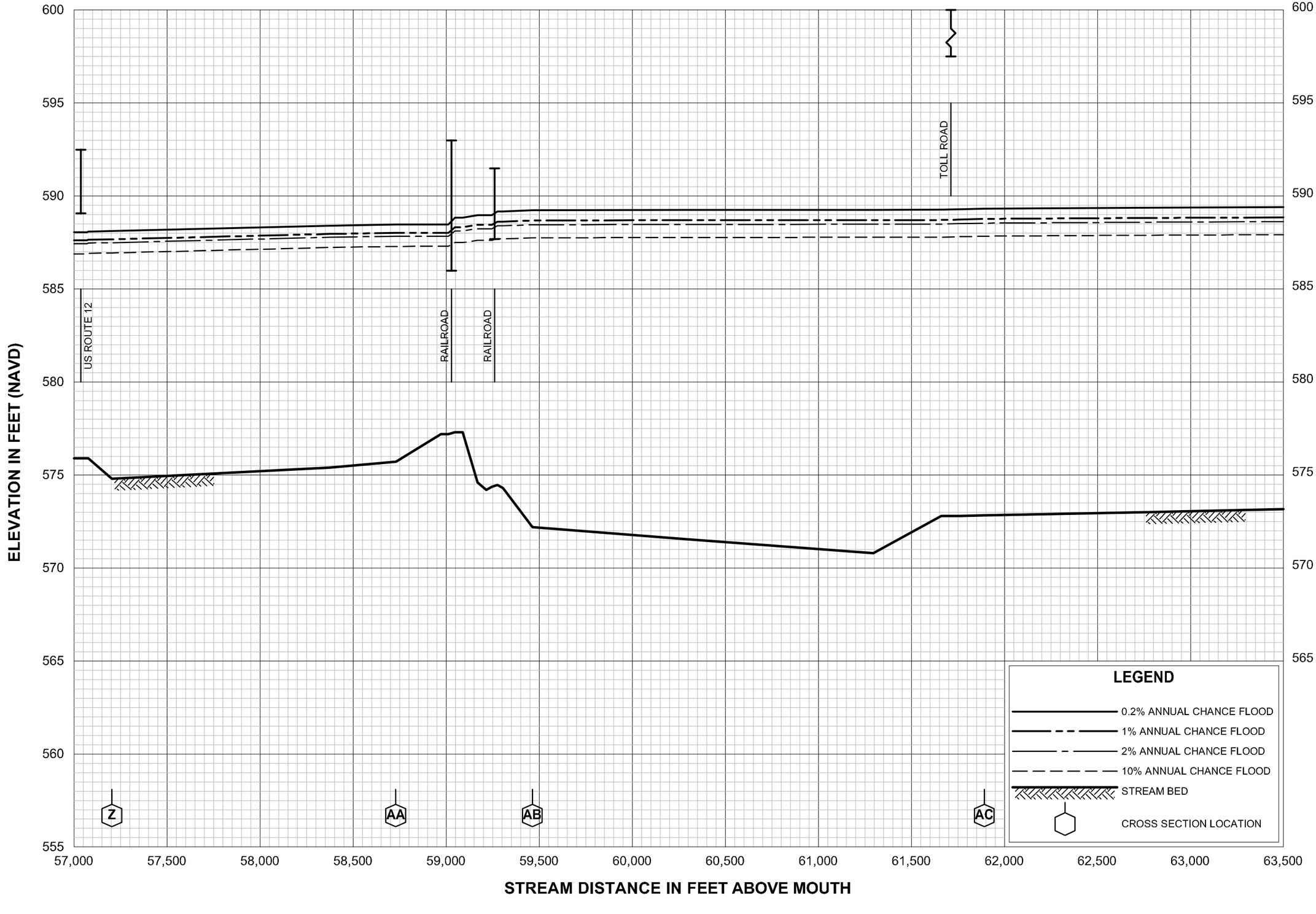
GRAND CALUMET RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

58P



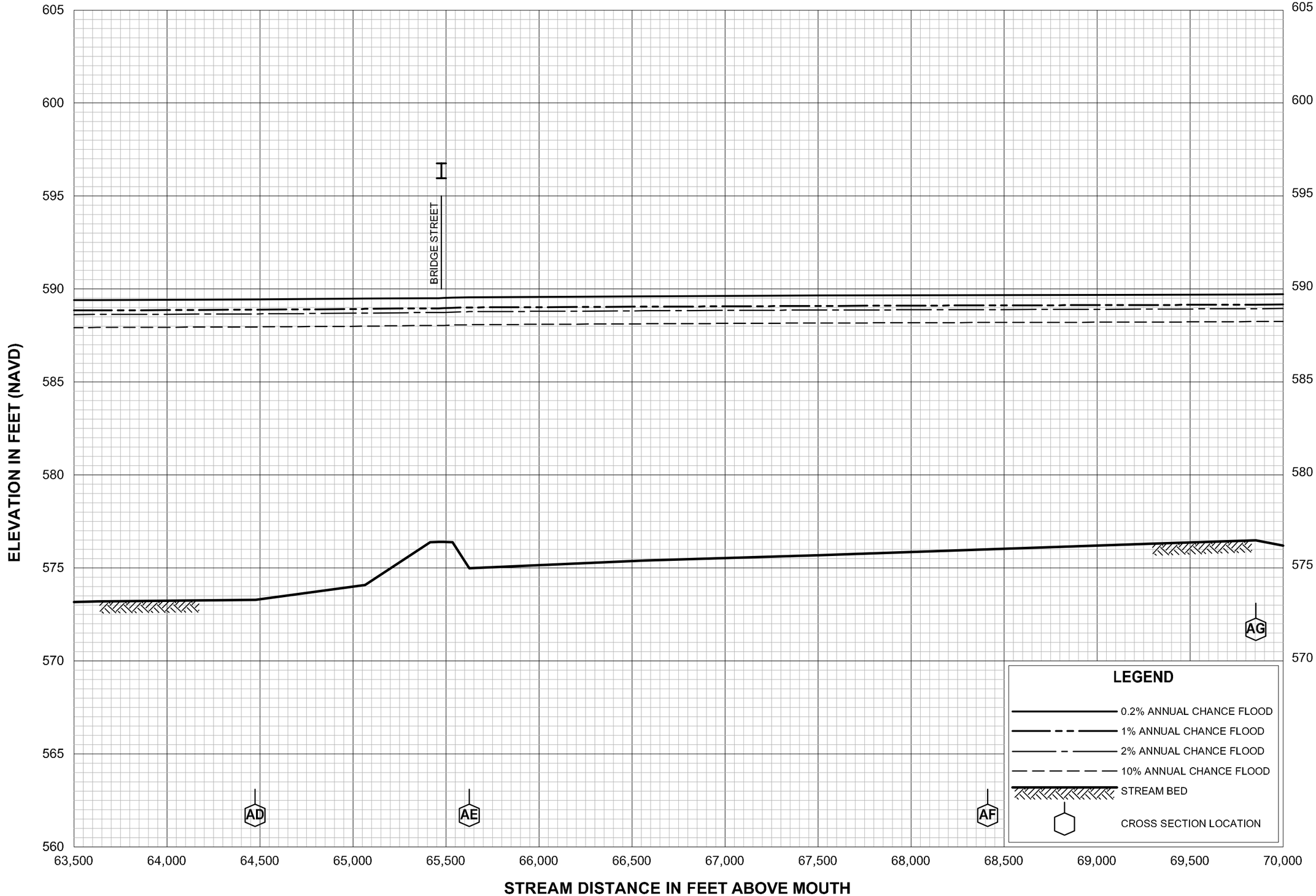
FLOOD PROFILES

GRAND CALUMET RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS



FLOOD PROFILES

GRAND CALUMET RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

60P

ELEVATION IN FEET (NAVD)

605
600
595
590
585
580
575
570
565
560

BUCHANAN STREET
TOLL ROAD
RAILROAD
RAILROAD
RAILROAD
RAILROAD
BROADWAY ST

AH
AI
AJ
AK
AL

70,000
70,500
71,000
71,500
72,000
72,500
73,000
73,500
74,000
74,500
75,000
75,500
76,000
76,500

STREAM DISTANCE IN FEET ABOVE MOUTH

LEGEND

- 0.2% ANNUAL CHANCE FLOOD
- 1% ANNUAL CHANCE FLOOD
- 2% ANNUAL CHANCE FLOOD
- 10% ANNUAL CHANCE FLOOD
- STREAM BED
- CROSS SECTION LOCATION

FLOOD PROFILES

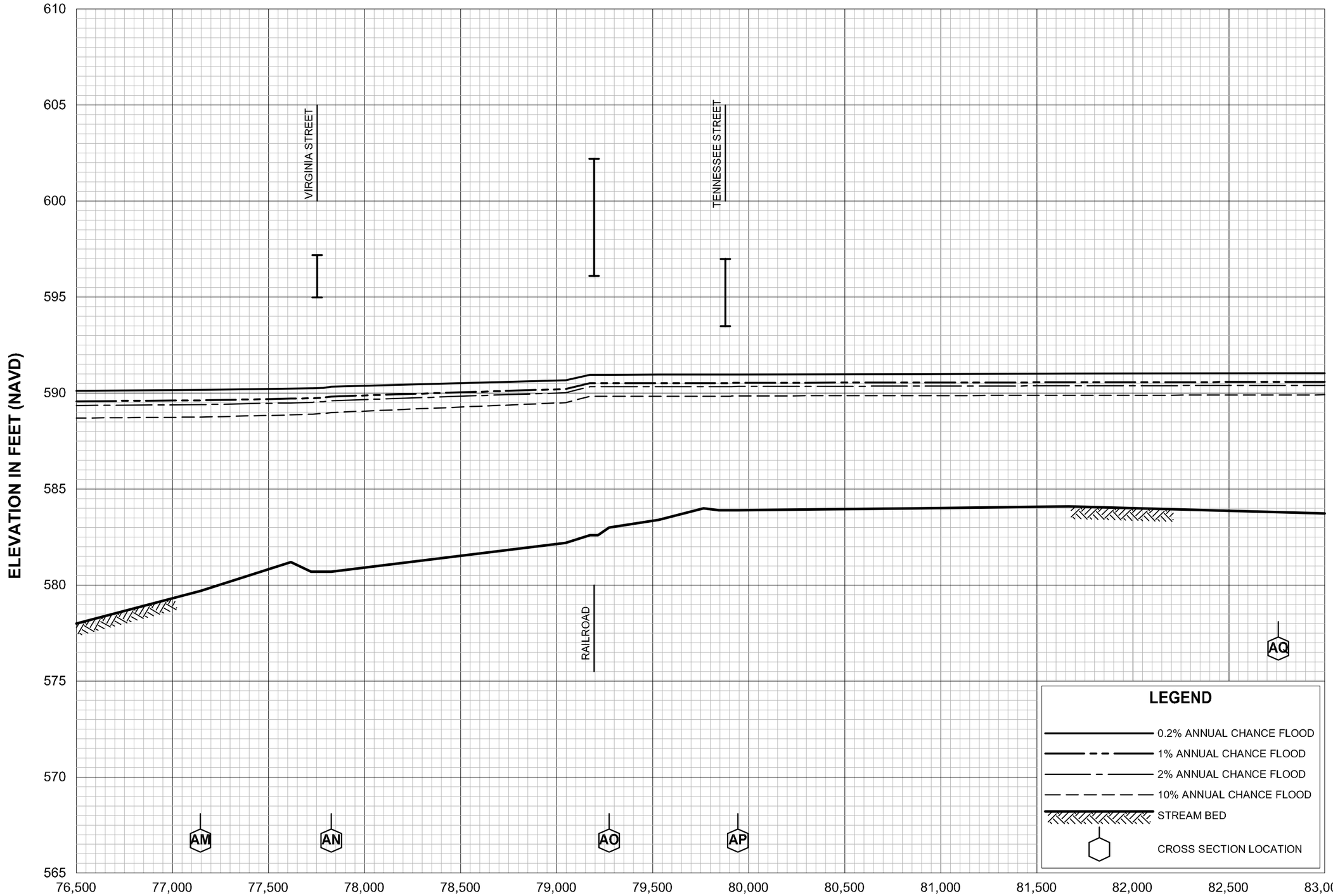
GRAND CALUMET RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

61P



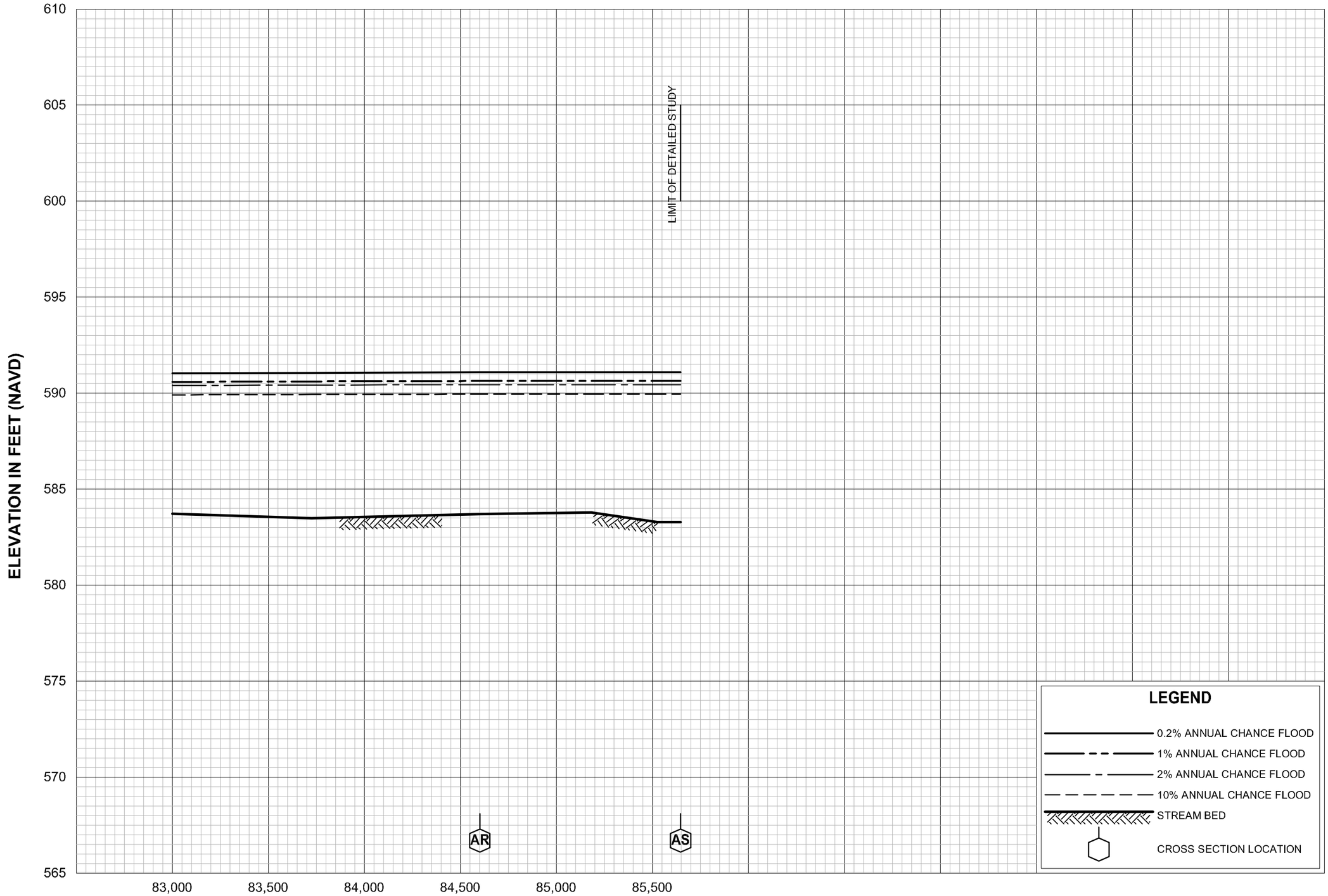
FLOOD PROFILES

GRAND CALUMET RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS



FLOOD PROFILES

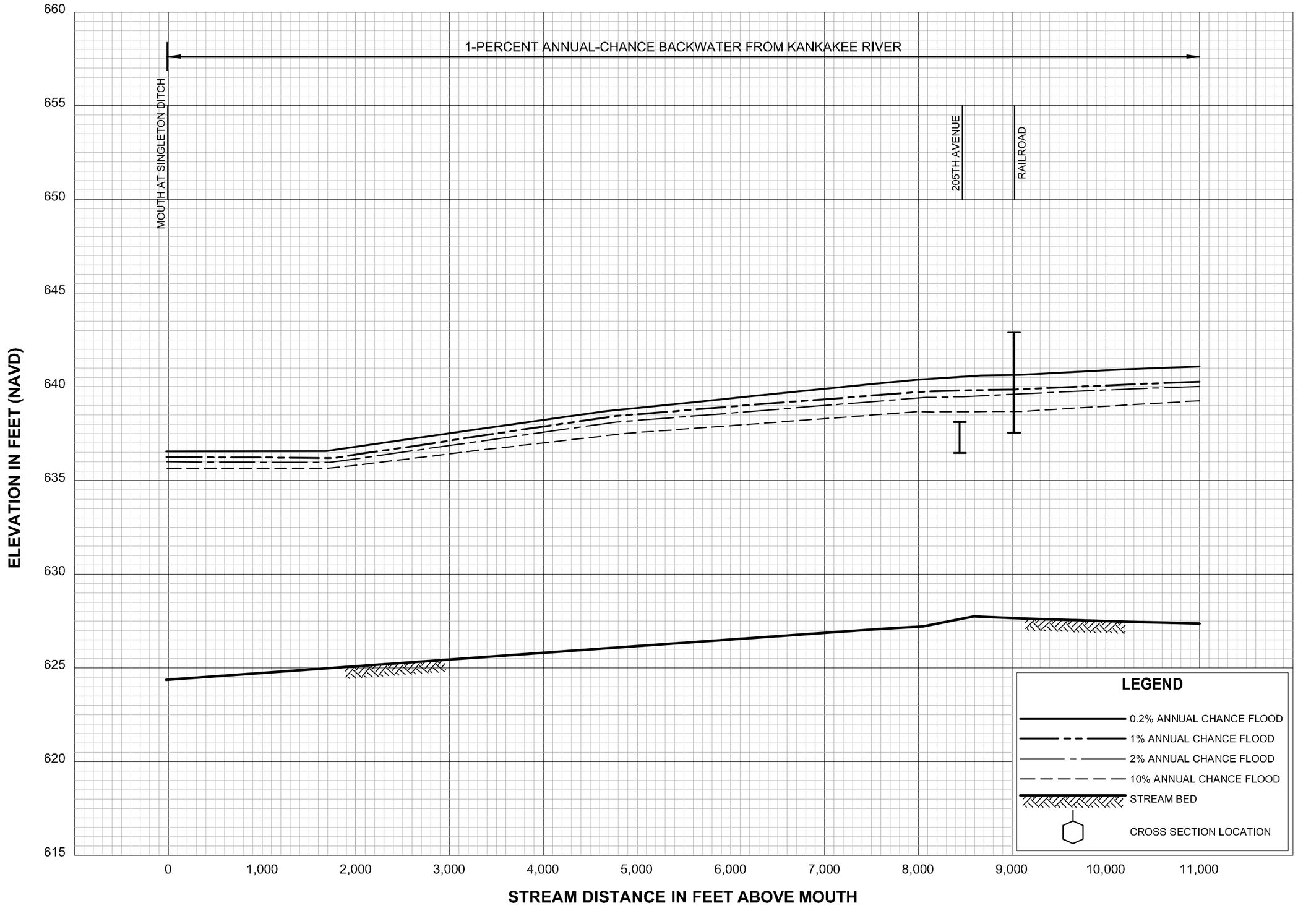
GRAND CALUMET RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

63P



FLOOD PROFILES

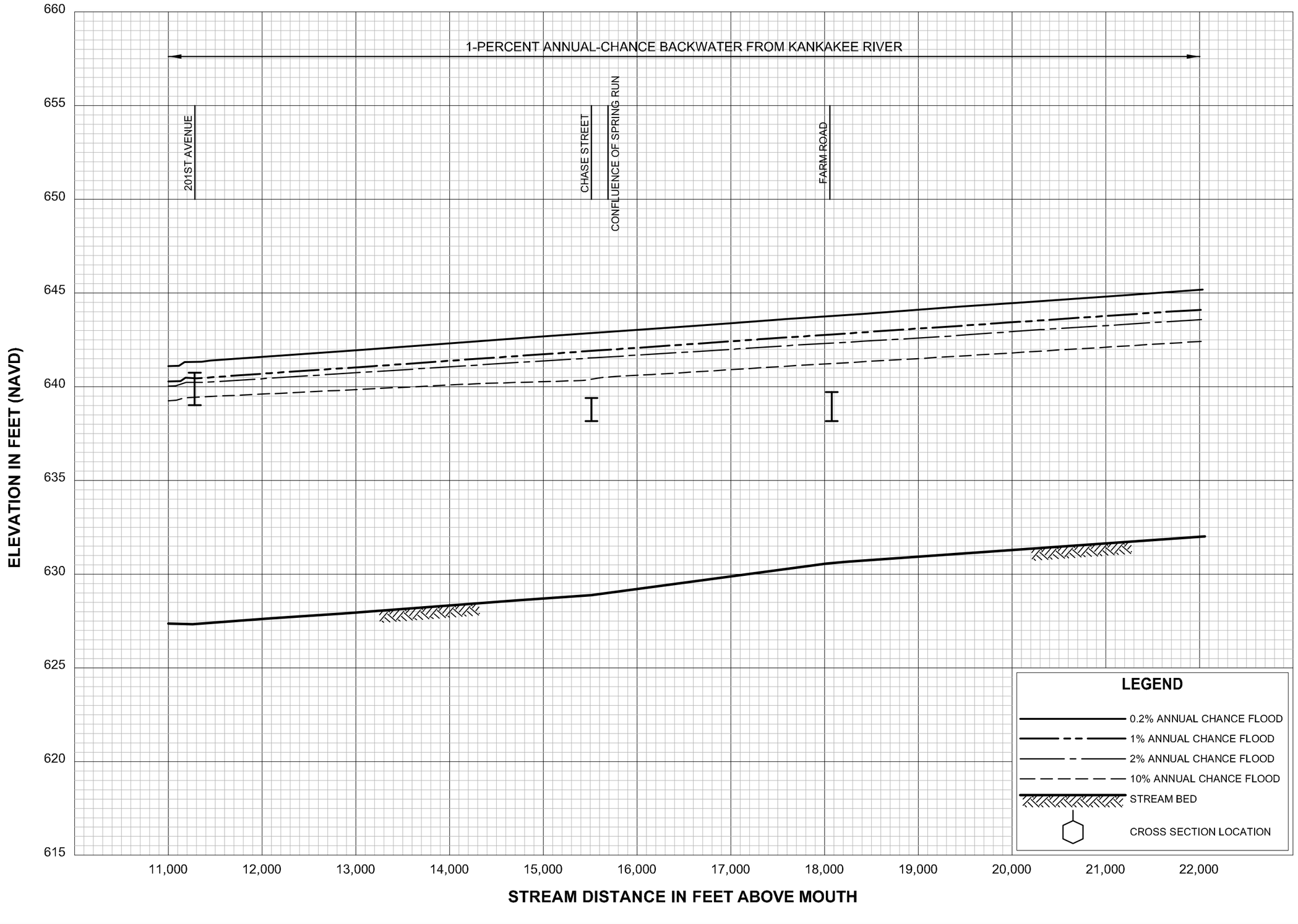
GRIESEL DITCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

64P



FLOOD PROFILES

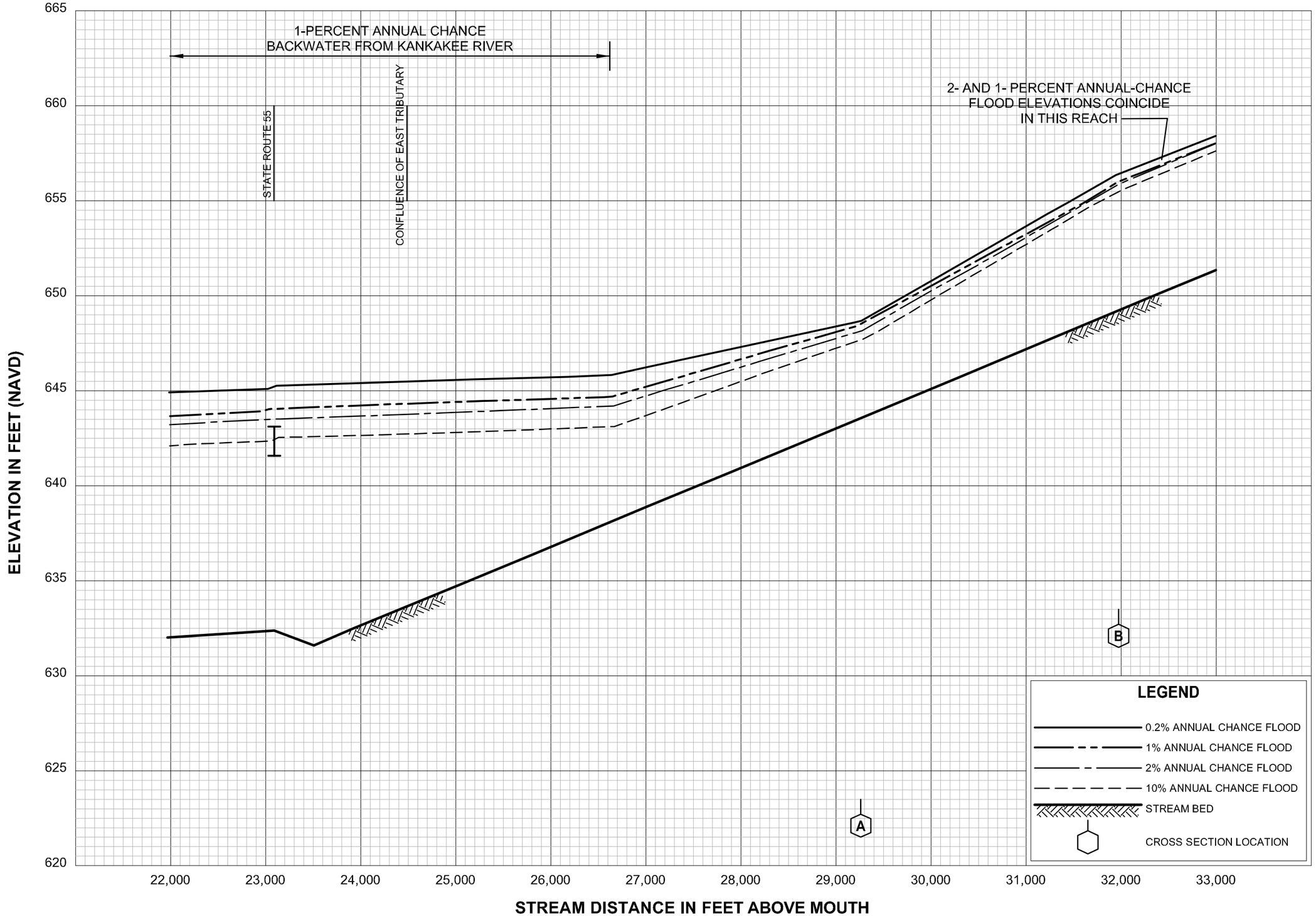
GRIESEL DITCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

UNINCORPORATED AREAS

65P



FLOOD PROFILES

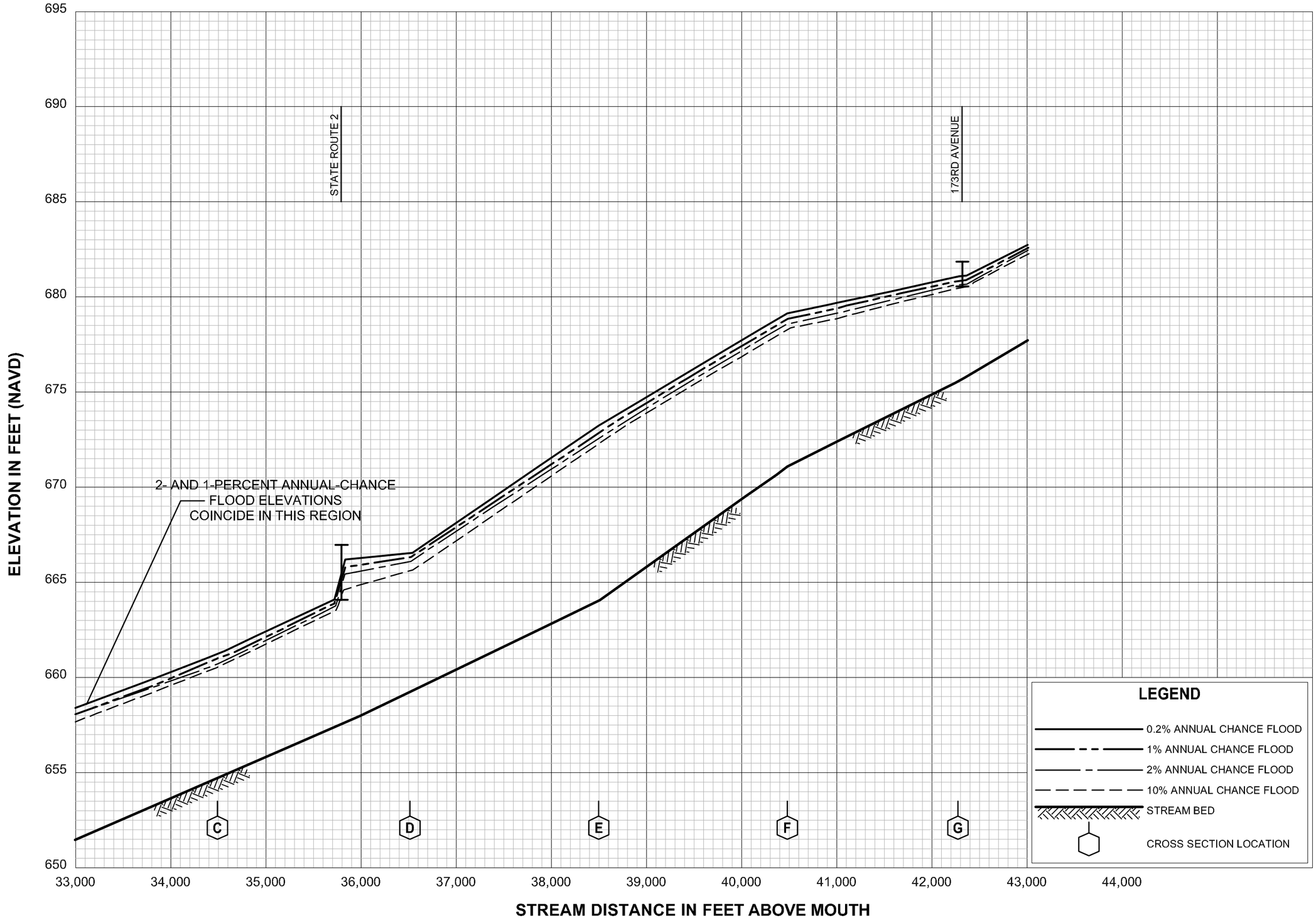
GRIESEL DITCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

66P



FLOOD PROFILES

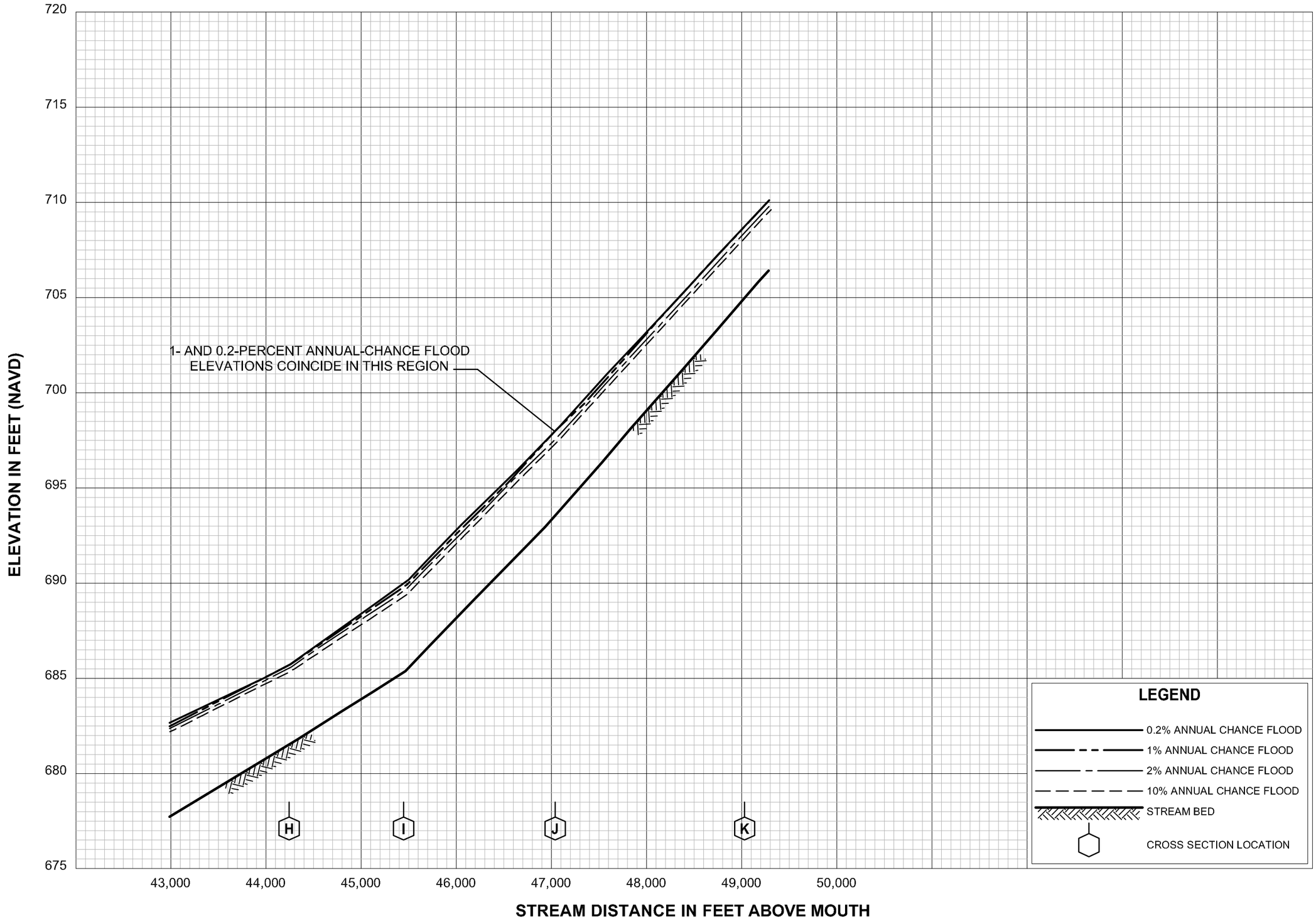
GRIESEL DITCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

67P



FLOOD PROFILES

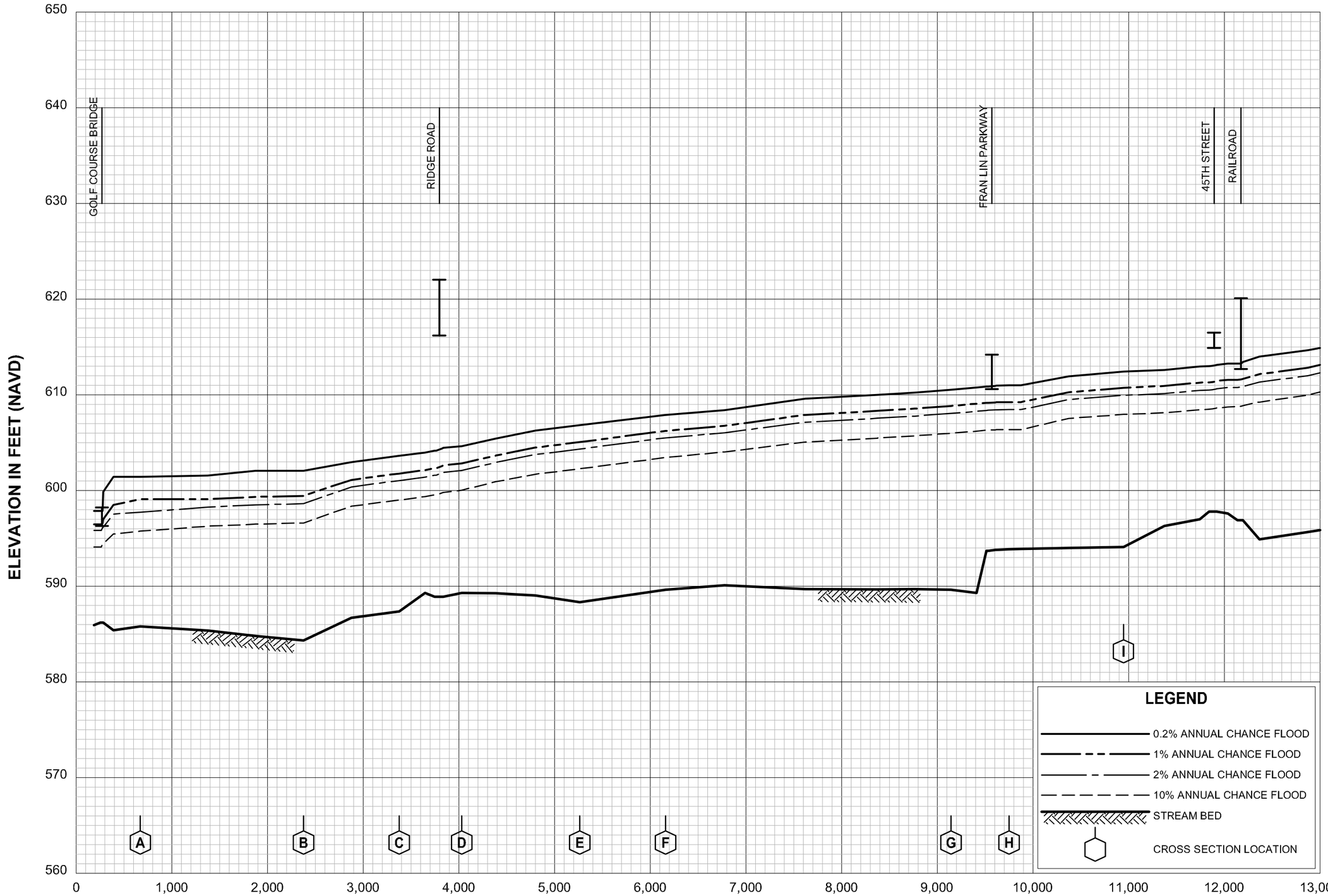
GRIESEL DITCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

68P



FLOOD PROFILES

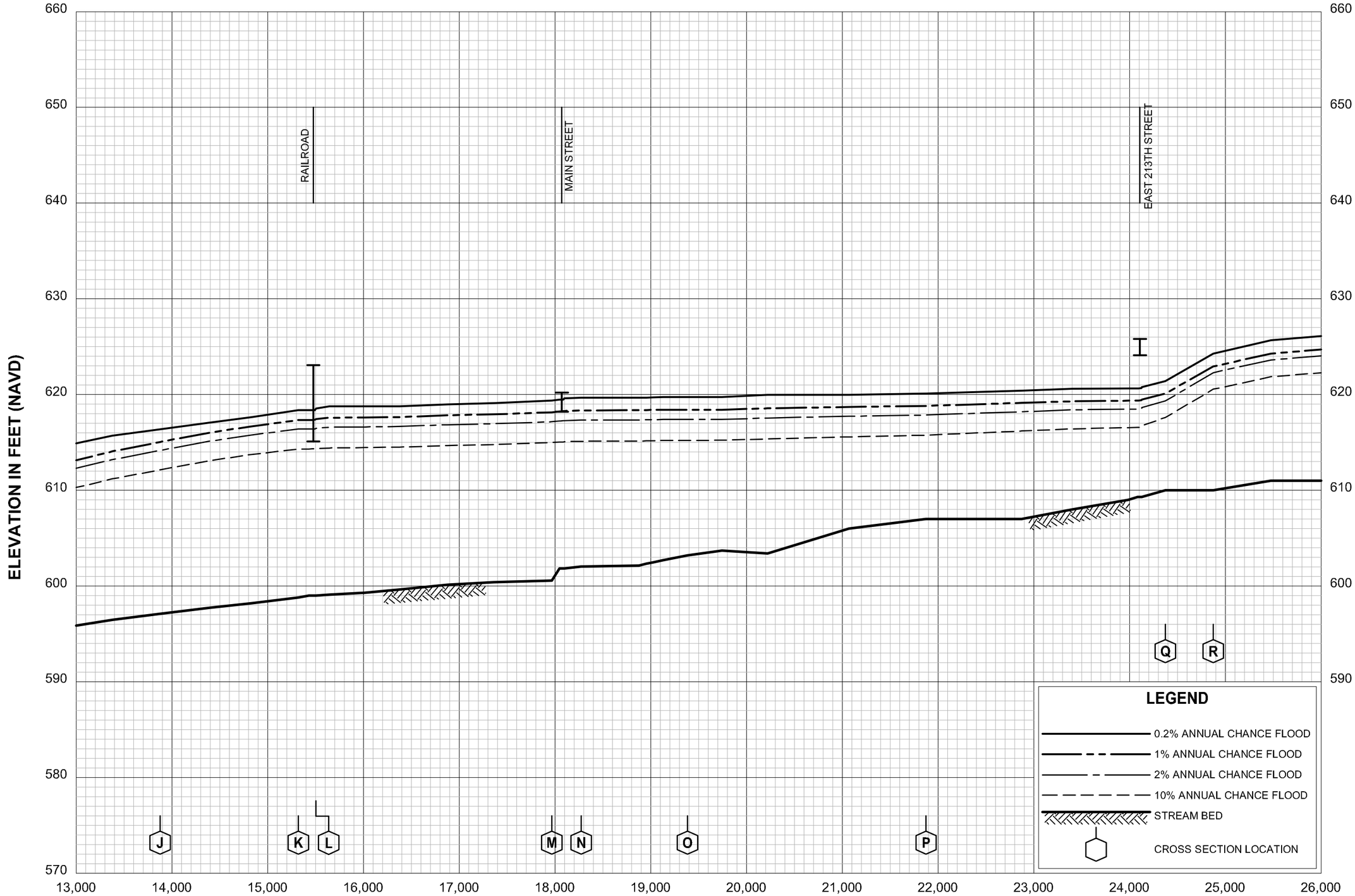
HART DITCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

69P



FLOOD PROFILES

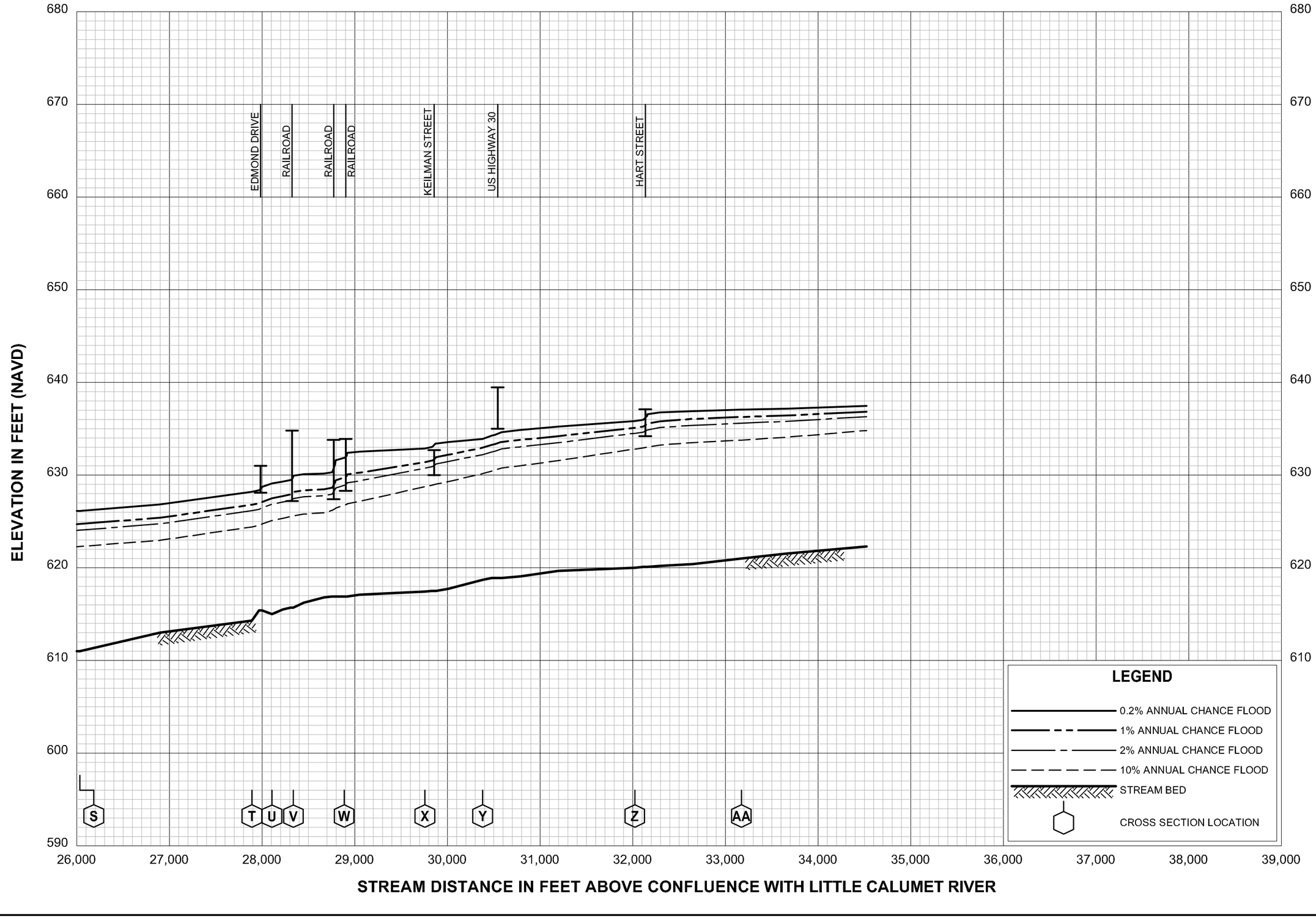
HART DITCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

70P



FLOOD PROFILES

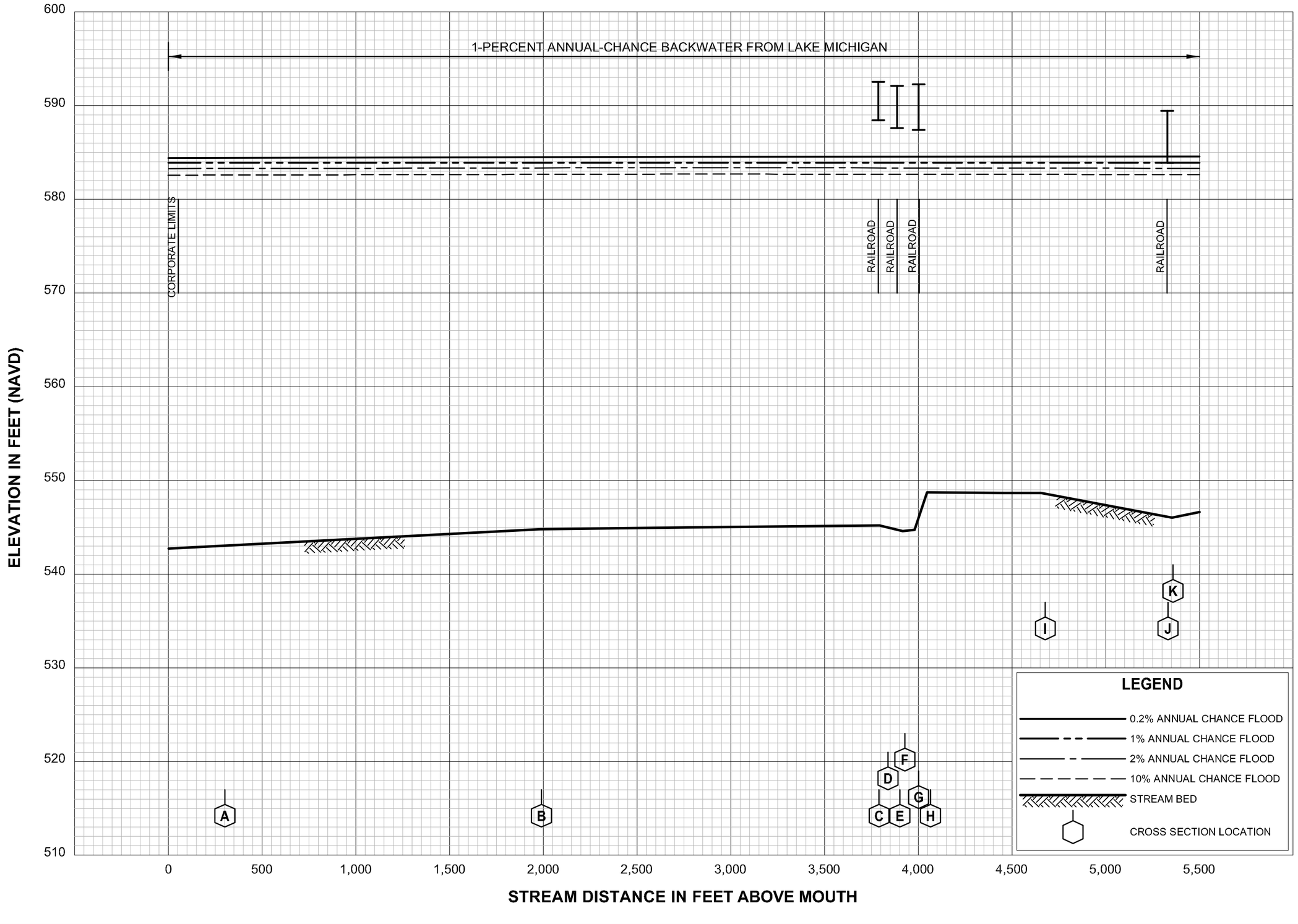
HART DITCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

71P



FLOOD PROFILES

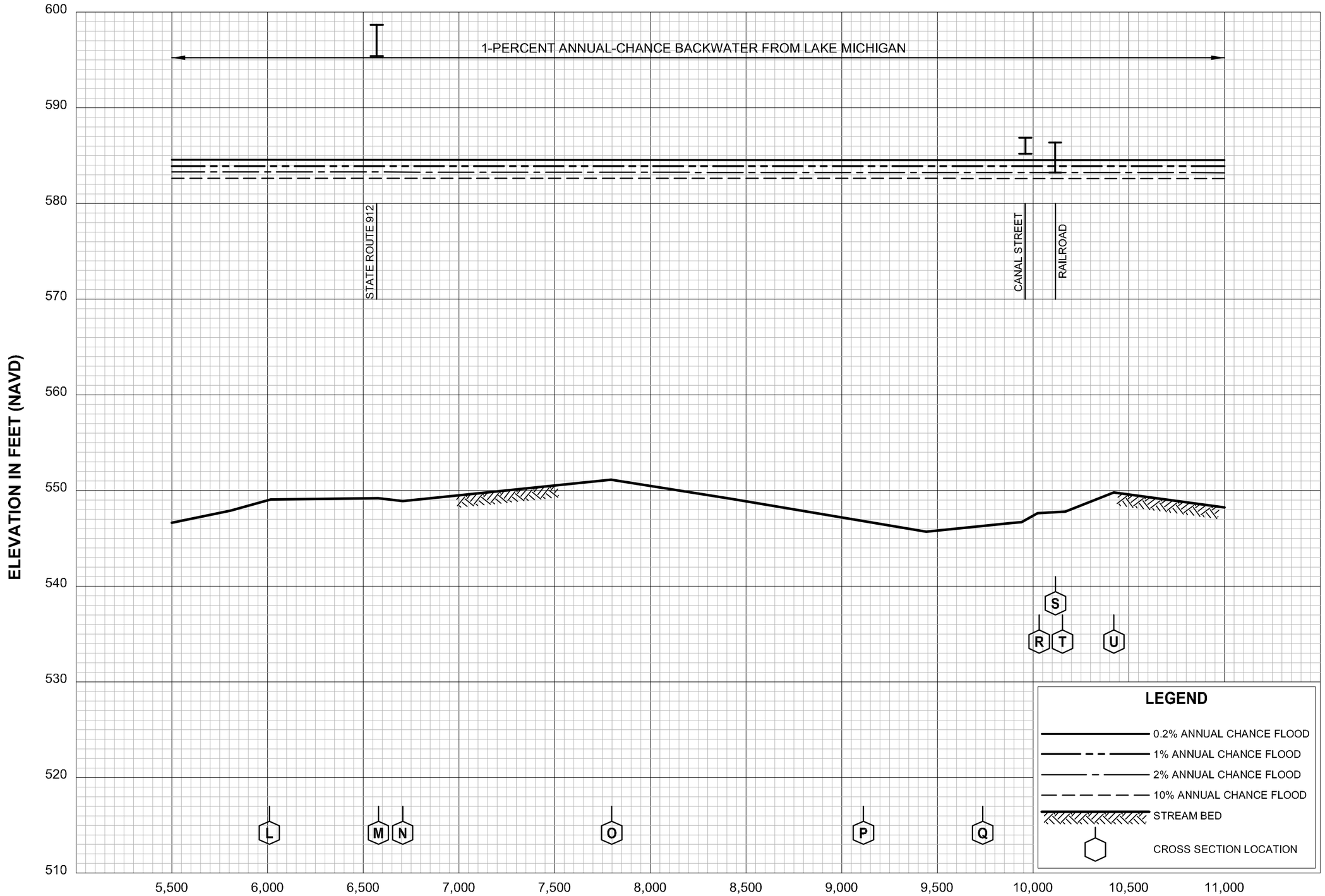
INDIANA HARBOR CANAL

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

72P



FLOOD PROFILES

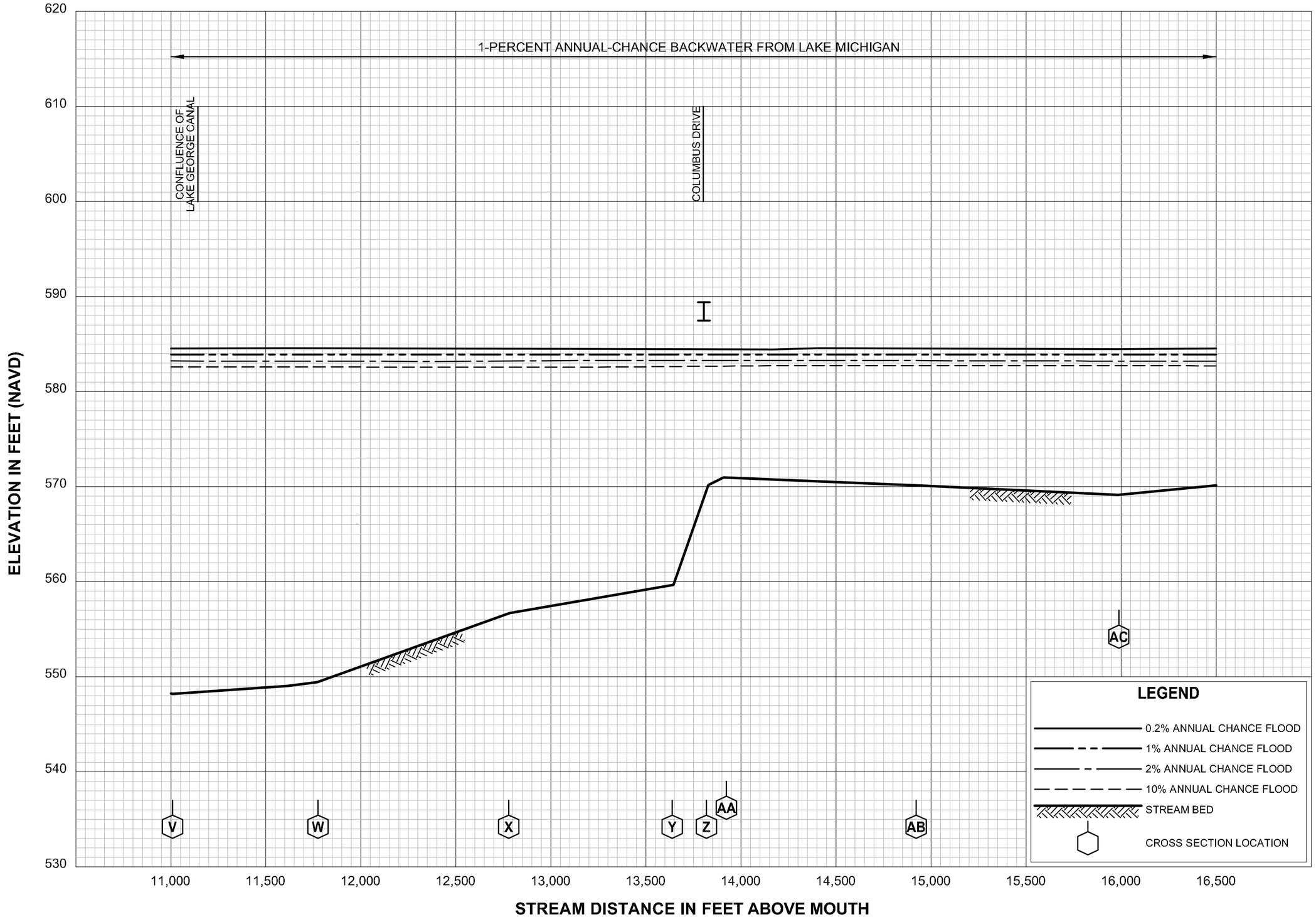
INDIANA HARBOR CANAL

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

73P



FLOOD PROFILES

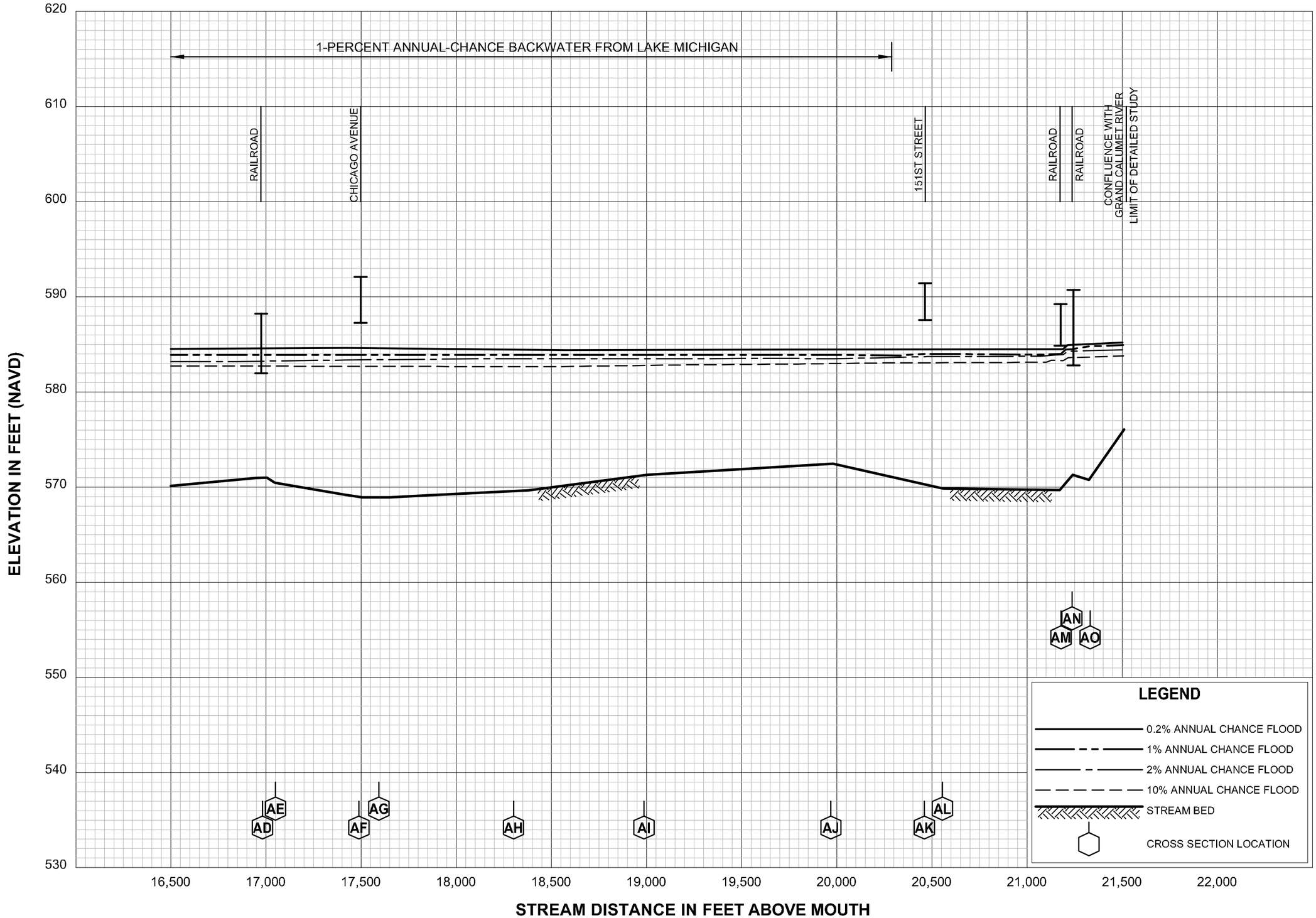
INDIANA HARBOR CANAL

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

74P



FLOOD PROFILES

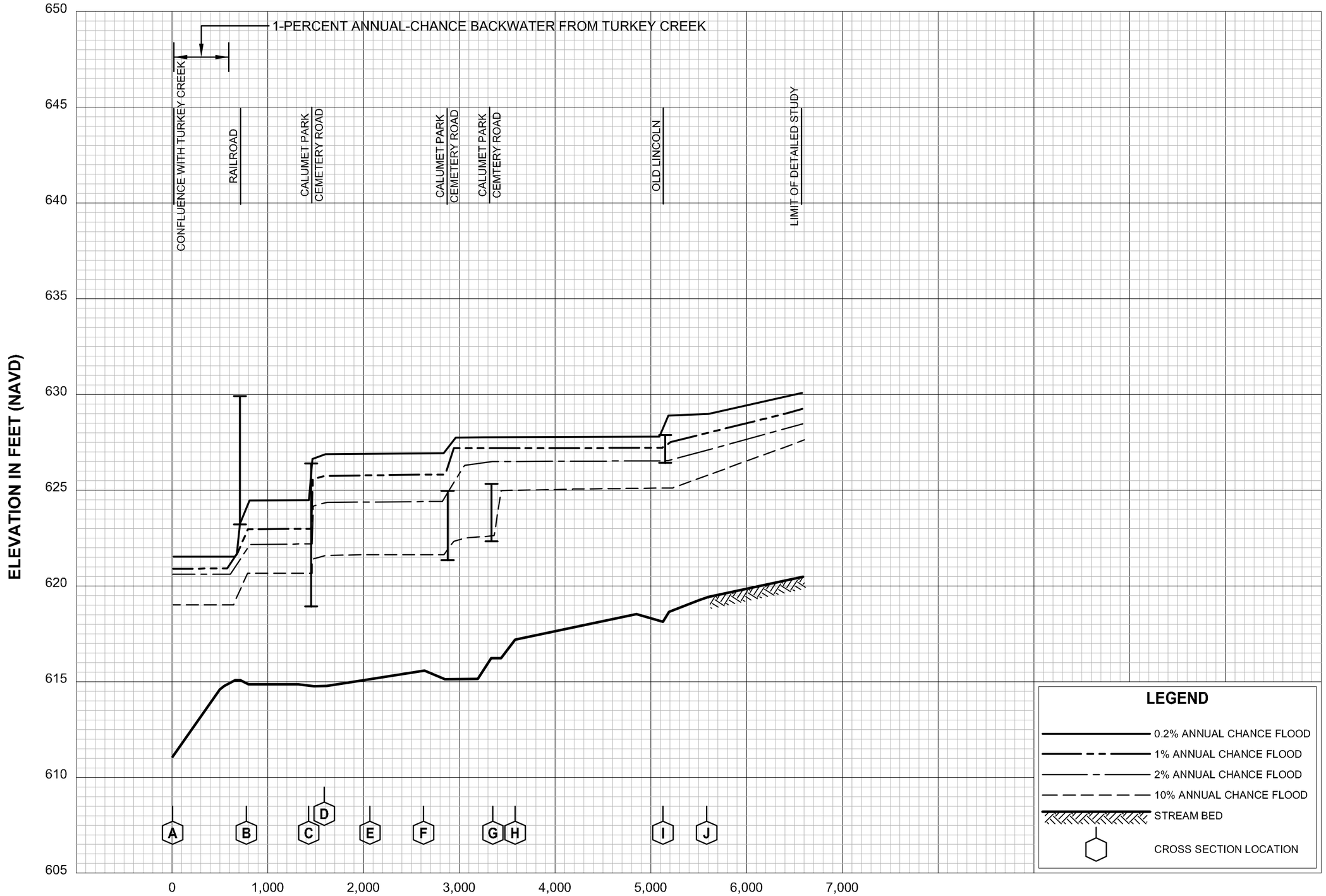
INDIANA HARBOR CANAL

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

75P



FLOOD PROFILES

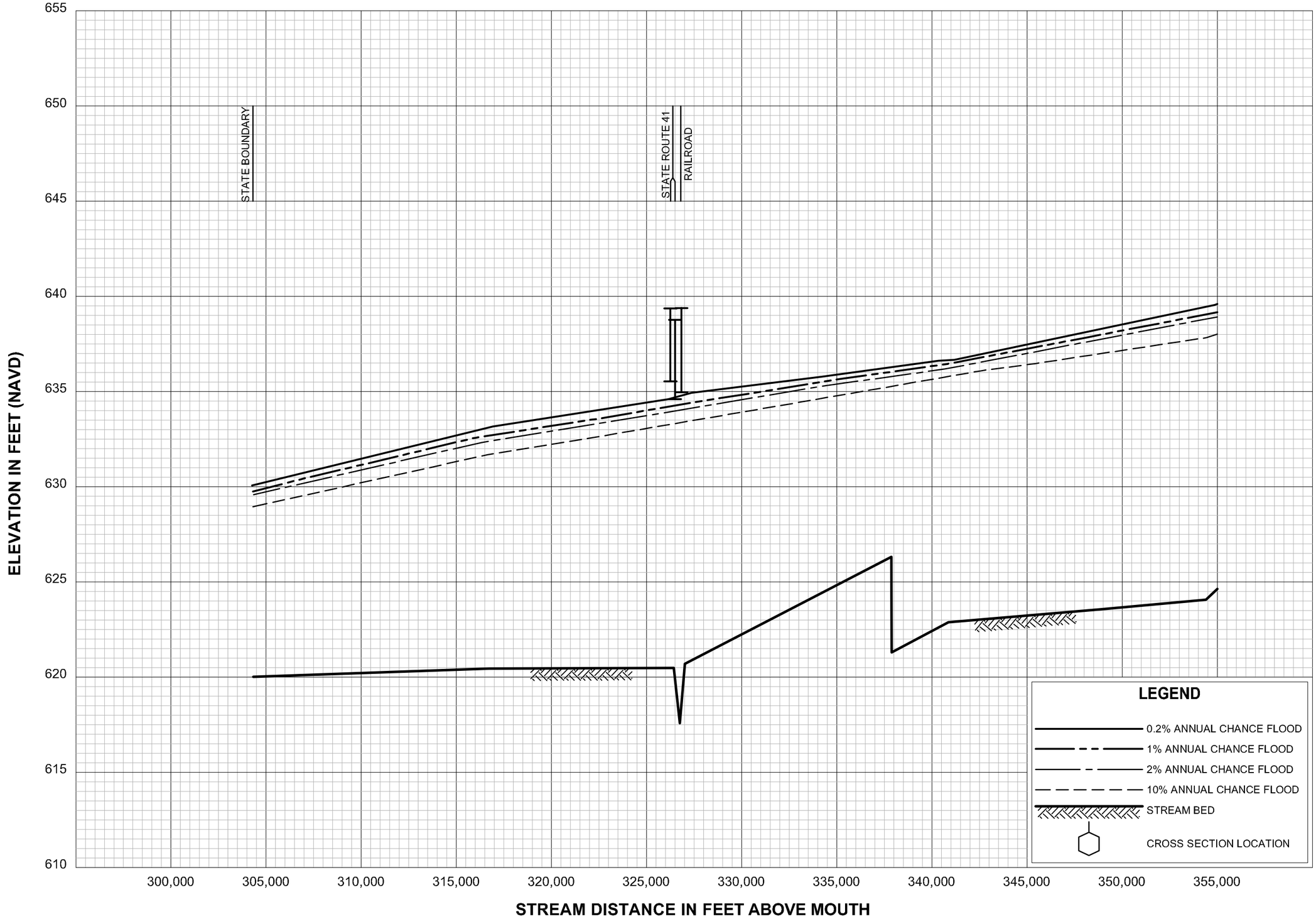
KAISER DITCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

76P



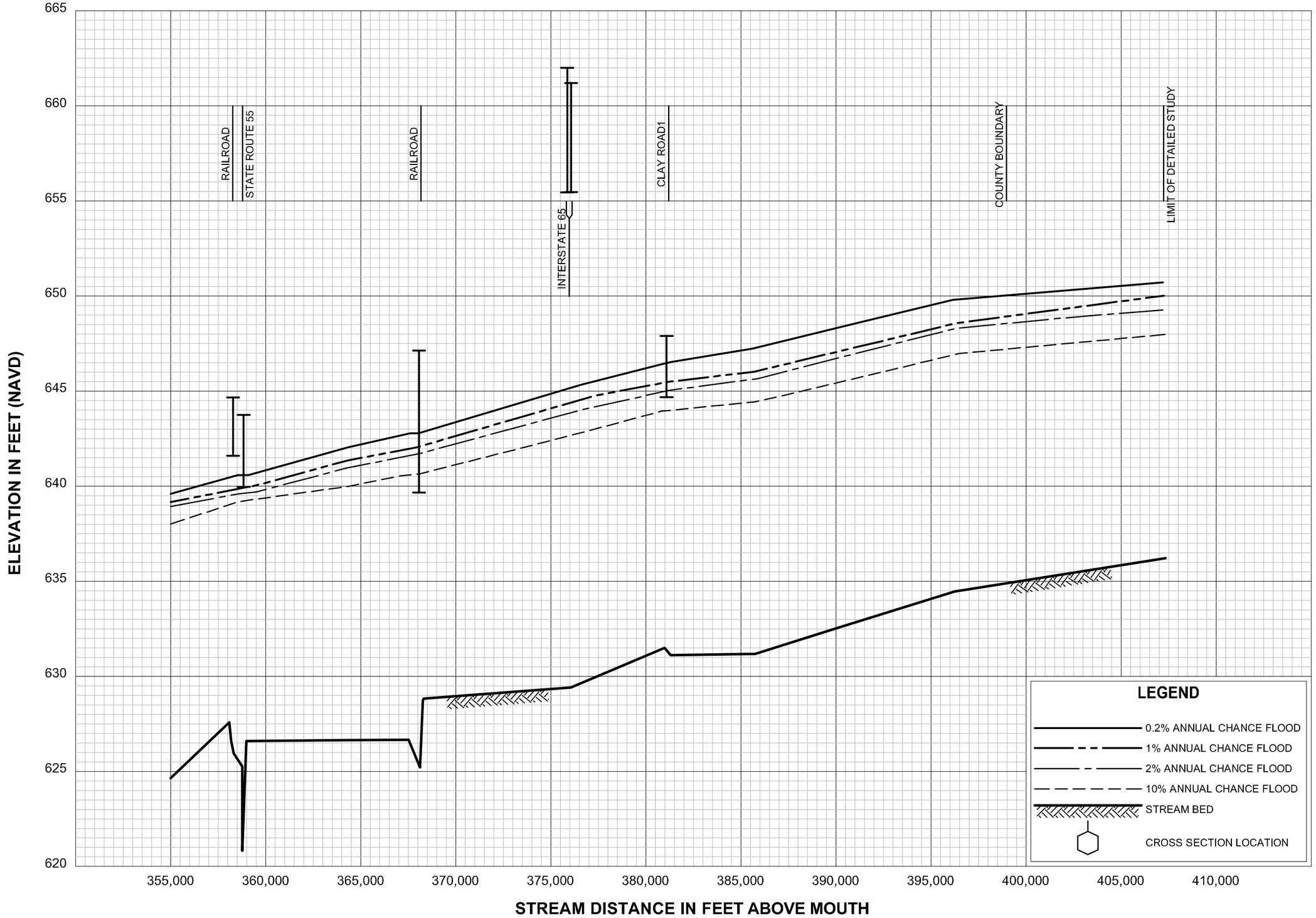
FLOOD PROFILES

KANKAKEE RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS



FLOOD PROFILES

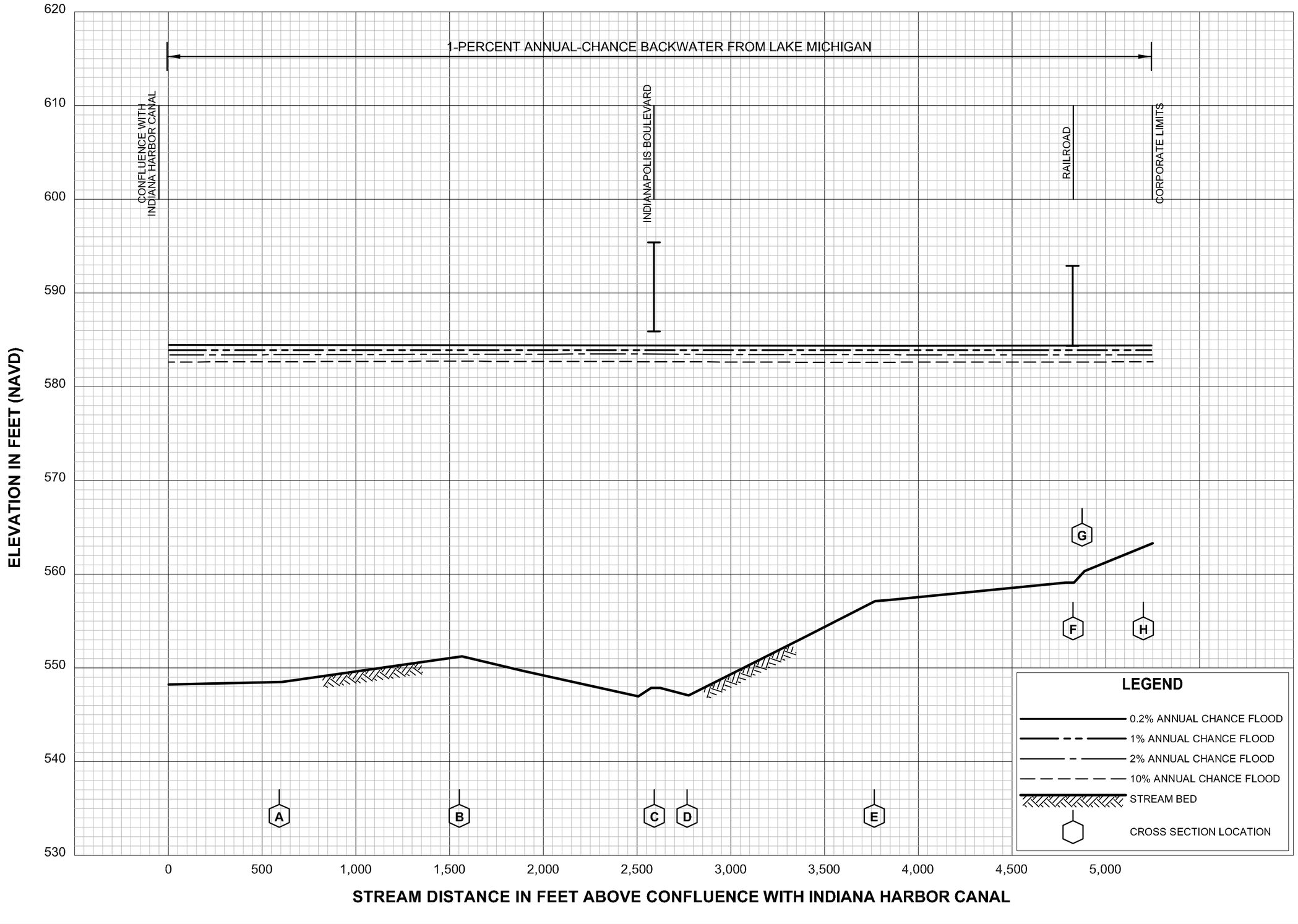
KANKAKEE RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

78P



FLOOD PROFILES

LAKE GEORGE CANAL

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

79P

ELEVATION IN FEET (NAVD)

615
610
605
600
595
590
585
580
575
570

LIMIT OF DETAILED STUDY
RAILROAD
GEORGIA STREET
GEORGIA STREET INTERCHANGE
BROADWAY
HARRISON STREET
INTERSTATE 80 AND 94

A B C D E F G

0 1,000 2,000 3,000 4,000 5,000 6,000 7,000 8,000 9,000 10,000 11,000

STREAM DISTANCE IN FEET ABOVE CONRAIL

LEGEND

- 0.2% ANNUAL CHANCE FLOOD
- 1% ANNUAL CHANCE FLOOD
- 2% ANNUAL CHANCE FLOOD
- 10% ANNUAL CHANCE FLOOD
- STREAM BED
- CROSS SECTION LOCATION

FLOOD PROFILES

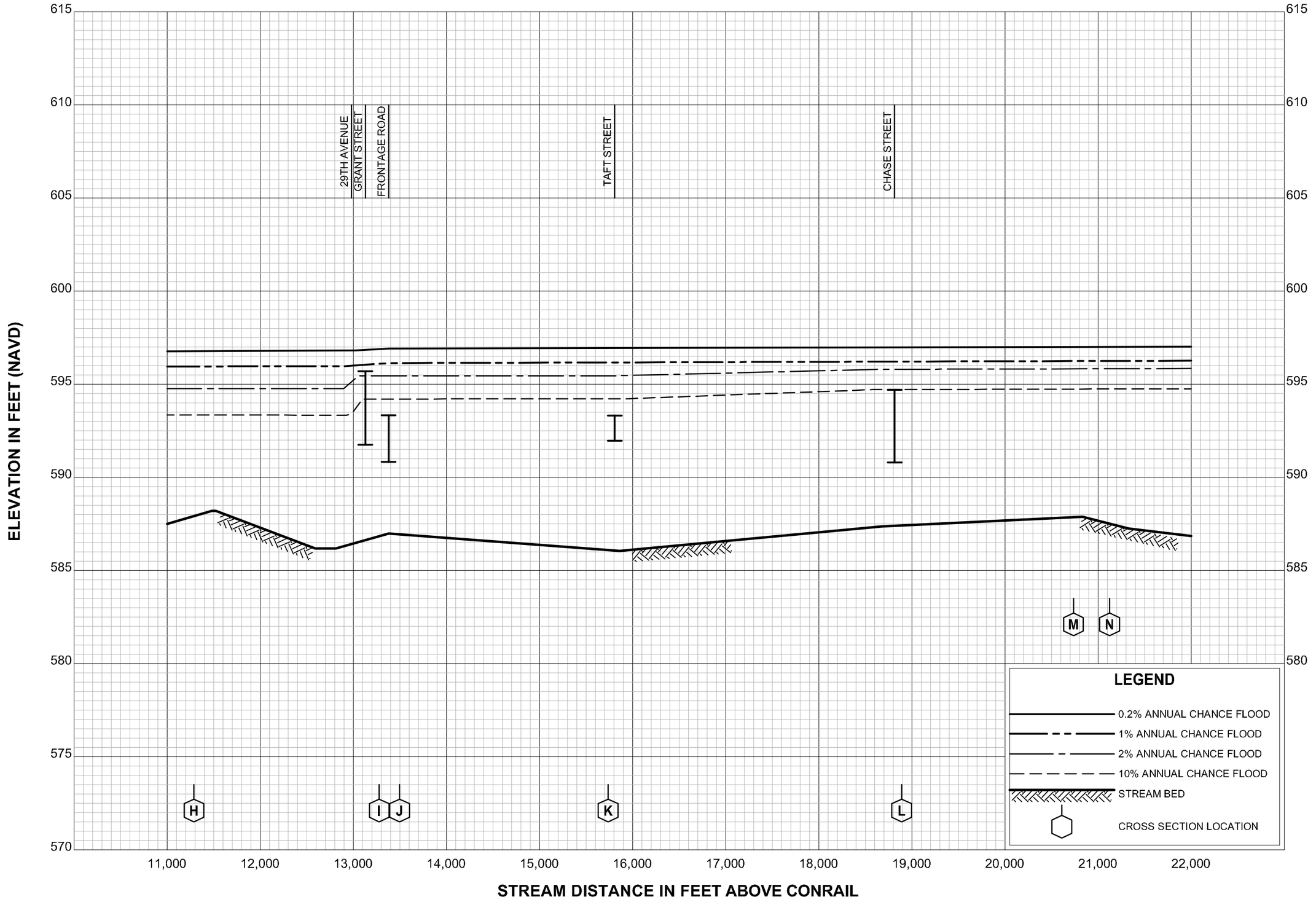
EAST LITTLE CALUMET RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

80P



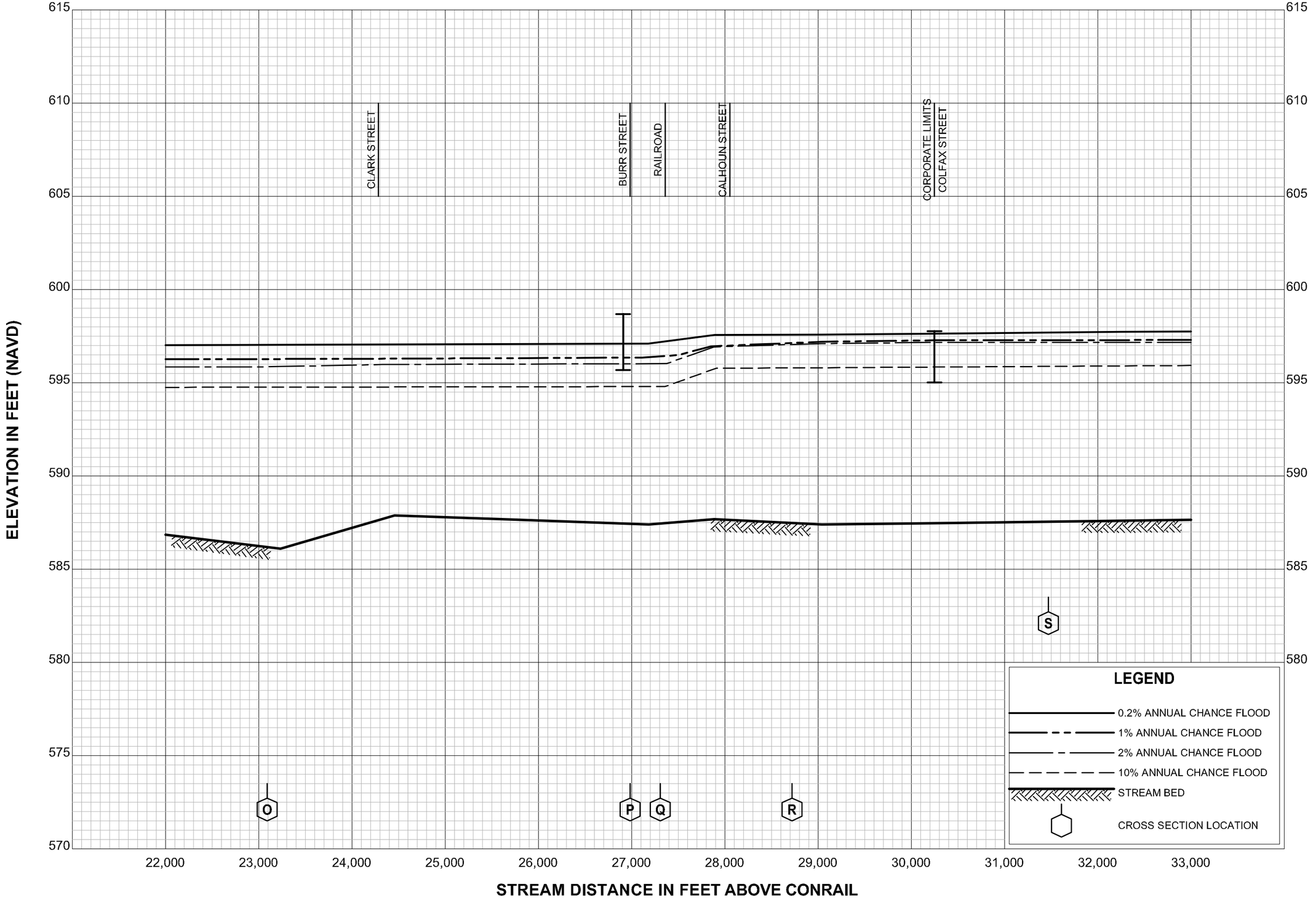
FLOOD PROFILES

EAST LITTLE CALUMET RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS



ELEVATION IN FEET (NAVD)

STREAM DISTANCE IN FEET ABOVE CONRAIL

FLOOD PROFILES

EAST LITTLE CALUMET RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

ELEVATION IN FEET (NAVD)

610
605
600
595
590
585
580
575
570
565

CORPORATE LIMITS
CORPORATE LIMITS
CORPORATE LIMITS
CLINE AVENUE
CORPORATE LIMITS
RAILROAD

T
V
U
X
W
Z
Y

33,000 34,000 35,000 36,000 37,000 38,000 39,000 40,000 41,000 42,000 43,000 44,000

STREAM DISTANCE IN FEET ABOVE CONRAIL

LEGEND

- 0.2% ANNUAL CHANCE FLOOD
- 1% ANNUAL CHANCE FLOOD
- 2% ANNUAL CHANCE FLOOD
- 10% ANNUAL CHANCE FLOOD
- STREAM BED
- CROSS SECTION LOCATION

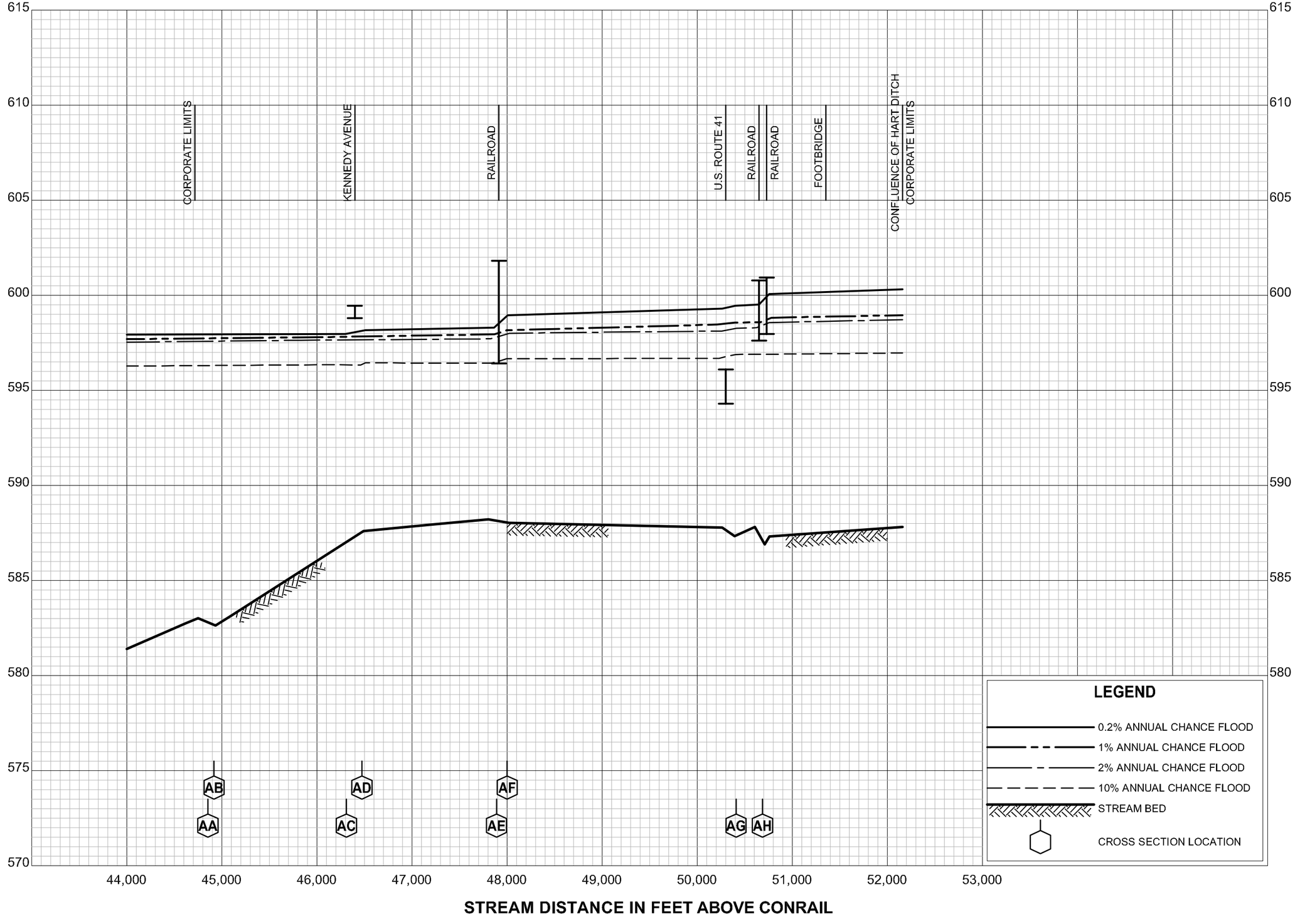
FLOOD PROFILES

EAST LITTLE CALUMET RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS



FLOOD PROFILES

EAST LITTLE CALUMET RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAKE COUNTY, IN

AND INCORPORATED AREAS

84P